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1.5 go-playground-locales 0.14.1

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1.8 zlib 1.3.1

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1.9 google-uuid 1.6.0

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1.10 go-urn 1.4.0

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1.14 locales 0.14.1

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1.16 sirupsen-logrus 1.9.3

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1.17 hashicorp-go-version 1.7.0

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1.18 go-version 1.7.0

1.18.1 Available under license :

```
# This is the official list of people who can contribute
# (and typically have contributed) code to the Go repository.
# The AUTHORS file lists the copyright holders; this file
# lists people.  For example, Google employees are listed here
# but not in AUTHORS, because Google holds the copyright.
#
# The submission process automatically checks to make sure
# that people submitting code are listed in this file (by email address).
#
# Names should be added to this file only after verifying that
# the individual or the individual's organization has agreed to
# the appropriate Contributor License Agreement, found here:
#
#     http://code.google.com/legal/individual-cla-v1.0.html
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#
# The agreement for individuals can be filled out on the web.
#
# When adding J Random Contributor's name to this file,
```

either J's name or J's organization's name should be
added to the AUTHORS file, depending on whether the
individual or corporate
 CLA was used.

Names should be added to this file like so:
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Individual's name <submission email address> <email2> <emailN>
#
An entry with multiple email addresses specifies that the
first address should be used in the submit logs and
that the other addresses should be recognized as the
same person when interacting with Gerrit.

Please keep the list sorted.

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1.19 alpine-keys 2.5-r0

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1.20 zlib 1.3.1-r2

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1.21 bash 5.2.37-r0

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1.23 scanelf 1.3.8-r1

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1.24 protobuf 1.5.4

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1.26 musl 1.2.5-r10

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* iconv.c
* Implementation of SUSv4 XCU iconv utility
* Copyright © 2011 Rich Felker
* Licensed under the terms of the GNU General Public License, v2 or later
*/

Found in path(s):

* /aports-master-main-musl-zip/aports-master-main-musl/main/musl/iconv.c
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```
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*
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*
* Mostly rewritten to be used in Alpine Linux (with musl c-library)
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*/
```

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```
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*
* This code is derived from software contributed to The NetBSD Foundation
* by Luke Mewburn.
* Timo Teräs cleaned up the code for use in Alpine Linux with musl libc.
*
```

```
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*/
```

Found in path(s):
* /aports-master-main-musl-zip/aports-master-main-musl/main/musl/getent.c

1.27 github.com/aws/aws-sdk-go-v2/internal/ini 1.8.3

1.27.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
```

```
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
```

```
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
```

```
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
```

```
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
```

```
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
```

```
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
```

```
            },
            "DomainNetworkSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
               },
               {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
         },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                  "smithy.api#required": {}
               }
            },
             "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
```

```
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoint": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
              "traits": {
                "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

           "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory":
{
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
           {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation":
 "<p>Value of the filter.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
              "traits": {

                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of the identity provider.</p>",

          "smithy.api#required": {}
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
```

```
            "FailureMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                  "smithy.api#required": {}
               }
            },
            "Products": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits":
{
                  "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                  "smithy.api#required": {}
               }
            },
            "LastStatusCheckDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date of the last status check.</p>"
               }
```

```
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

 "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
            }

    },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
      "type": "list",
      "member": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
         "smithy.api#httpError": 500
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

      },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
```

```
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
    },
    {

     "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager User Subscriptions",
      "arnNamespace": "license-manager-user-subscriptions",
      "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-user-subscriptions"
    },
    "aws.protocols#restJson1": {},
```

```
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
            "x-api-key",

      "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn":
 "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
```

```
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured
 endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
            },
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "isSet",
                    "argv": [
                      {
                        "ref": "Endpoint"
                      }
                    ]
                  }
                ],

            "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
                            },
                            true
                          ]
                        }
                      ],
                      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [
                        {

 "fn": "booleanEquals",
                          "argv": [
```

```
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},

                    "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "aws.partition",
                                "argv":
[
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
```

```
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true

        ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",

                          "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
                                            ]
                                        }
                                    ]
                                },

{
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                                    true,
                                    {
                                      "fn": "getAttr",
                                      "argv": [
                                        {
                                          "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                      ]
                                    }
                                  ]

                                }
                              ],
                              "rules": [
                                {
                                  "conditions": [],
                                  "endpoint": {
                                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                  },
                                  "type": "endpoint"
                                }
                              ],

                    "type": "tree"
                                },
                                {
                                  "conditions": [],
                                  "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                                  "type": "error"
                                }
                              ],
                              "type": "tree"
                            },
                            {
                              "conditions": [
                                {
                                  "fn": "booleanEquals",
                                  "argv": [
                                    {

                        "ref": "UseFIPS"
                                    },
                                    true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {

                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                       "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
              }

        ],
            "type": "tree"
          },
          {
            "conditions": [
```

```
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [

               {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsDualStack"
                            ]
                          }

          ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                   "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
```

```
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
```

```
                "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,

        "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {

  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
```

```
            "UseDualStack":
true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url":
"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack":
false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack":
true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },

      {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
```

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      "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,

      "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {

              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint":
 "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
```

```
                "smithy.api#documentation":
 "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
              }
            },
            "LicenseServerEndpointProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
              }
            },
            "LicenseServers": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
              }
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
              "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
          "type": "string"
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
          "type": "string",
          "traits":
 {
            "smithy.api#enum": [
              {
```

```
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
             "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
```

```
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
          "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",

              "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/ListIdentityProviders"
            },

          "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "IdentityProviderSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
    <ul>\n        <li>\n        <p>Product</p>\n        </li>\n        <li>\n        <p>DirectoryId</p>\n
  </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {

       "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that
contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
```

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"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
        </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
          "smithy.api#paginated": {

          "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
```

```
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits":
 {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
             "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                 "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
```

```
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
          "type":
 "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {

                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

\n\tfrom a previously truncated response. "

          }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
              "traits": {
                "smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
 retrieve additional objects. "
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },

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            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

         }
          ],
          "traits": {
             "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
             "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
             "smithy.api#readonly": {}
          }
       },
       "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
             "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                   "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                   "smithy.api#httpLabel": {},
                   "smithy.api#required": {}
                }
             }
          },
          "traits": {

      "smithy.api#input": {}
          }
       },
       "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
             "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                   "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
             }
          },
          "traits": {
             "smithy.api#output": {}
          }
       },
       "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
```

```
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required":
 {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline
 results:</p>\n        <ul>\n        <li>\n        <p>Status</p>\n        </li>\n        <li>\n
<p>Username</p>\n        </li>\n        <li>\n        <p>Domain</p>\n        </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",

            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory
that contains the user information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
    "type": "structure",
```

```
        "members": {
          "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type":
 "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
 \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",

     "smithy.api#required": {}
            }
          }
        },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 404
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
{
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
```

```
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
              "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
           }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
          "type": "structure",
          "members": {
            "Endpoint": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
          "type": "union",
          "members": {
            "RdsSalSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
          }
        },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
      "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
            "smithy.api#required": {}
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
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            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
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```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },

"errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],

    "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An
 object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The
 domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StringList": {
          "type": "list",
           "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
```

```
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {

    "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },

    "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
```

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }

       },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
```

```
request.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "TagKeys": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
              "traits": {

  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                "smithy.api#httpQuery": "tagKeys",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
          },

 "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
      },
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
        }
      },
      "IdentityProviderArn": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
        }
      },
      "UpdateSettings": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {

  "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required": {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
```

This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

```
 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

```
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

```
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
//
the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware

```
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
```

```
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

```
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
          "type": "structure",
          "members": {
            "AmiId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
              }
            },
            "InstanceID": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
```

```
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
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            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
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            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

```
                        true
                    ]
                }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
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                        "conditions": [],
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                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

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            ],
            "type": "tree"
        },
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            "conditions": [],
            "rules": [
```

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          "argv": [
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              "ref": "Region"
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"fn": "aws.partition",
              "argv": [
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              "assign": "PartitionResult"
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          "rules": [
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                  "fn": "booleanEquals",
                  "argv": [
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                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
```

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                                                "fn": "getAttr",
                                                "argv": [
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                                                    "ref": "PartitionResult"

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                                                    "supportsFIPS"
                                                  ]
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                                              ]
                                            },
                                            {
                                              "fn": "booleanEquals",
                                              "argv": [
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                                                {
                                                  "fn": "getAttr",
                                                  "argv": [

                                                   {
                                                      "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                  ]
                                                }
                                              ]
                                            }
                                          ],
                                          "rules": [
                                            {
                                              "conditions": [],

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                                                  "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
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              "type": "endpoint"
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      {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
        "type": "error"
      }
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    "type": "tree"
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  {

"conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
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            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {

"fn": "booleanEquals",
            "argv": [
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
```

```
                                        },
                                        true

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                            "rules": [
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                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                "headers": {}
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                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
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                            "conditions": [],
                            "error": "FIPS is enabled
but this partition does not support FIPS",
                            "type": "error"
                        }
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                    "type": "tree"
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                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                    ]
                        }
```

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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
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                                "conditions": [],
                                "rules": [

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                                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"

                    }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
```

```
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                                "conditions": [],
                                "rules": [
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                                        "conditions": [],
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                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
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                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
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```
      }
    },
    {

  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
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    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {

        "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
```

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      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
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        "UseFIPS":
false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
         }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
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                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
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                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }

        },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {

                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
```

```
                "params": {
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                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

"Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

       },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

  {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
```

```
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Instances"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n         <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n         <ul>\n            <li>\n
   <p>\n                  <code>AccountID</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
      <code>AmiID</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>DualSubscription</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>InstanceID</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>InstanceType</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>ProductCode</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Region</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Status</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>UsageOperation</code>\n               </p>\n            </li>\n         </ul>\n         <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>equals</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Notequal</code>\n               </p>\n            </li>\n         </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
```

```
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
         "members": {
            "Instances": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
               }
            },
            "NextToken": {

          "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n          <p>The valid names for this filter are:</p>\n          <ul>\n <li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n          </li>\n          </ul>\n <p>The
       valid Operators for this filter are:</p>\n          <ul>\n          <li>\n              <p>\n <code>contains</code>\n              </p>\n          </li>\n          <li>\n              <p>\n <code>equals</code>\n              </p>\n          </li>\n          <li>\n              <p>\n <code>Notequal</code>\n              </p>\n          </li>\n          </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
          "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
```

```
                }
            }

  },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },

        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
      },
```

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        "errors": [
          {

       "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
               "smithy.api#httpLabel": {},
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
```

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
```

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
```

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            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
```

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        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
```

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third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
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                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
```

```
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                "name": "RedHat",
```

```
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
      "type": "structure",
      "members":
{
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
            "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
   "type": "structure",
   "members": {},
   "traits": {
      "smithy.api#output": {}
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
   "type": "operation",
   "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
   },
   "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
   "errors": [
      {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
      },
      {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
   ],
   "traits": {
      "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
      "smithy.api#http": {
         "code": 200,
         "method": "POST",
         "uri": "/subscription/UpdateServiceSettings"
      },
      "smithy.api#idempotent": {}
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
   "type": "structure",
   "members": {
       "LinuxSubscriptionsDiscovery": {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
         "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required": {}
         }
      },
```

```
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
```

```
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {

```
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
```

```
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
```

```
    "target": "com.amazonaws.licensemanager#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
   },
  {
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {

   "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
```

```
            {
              "target": "com.amazonaws.licensemanager#ListTokens"
            },
            {
              "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
             },
            {
              "target": "com.amazonaws.licensemanager#RejectGrant"
            },
            {
              "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
              "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
          ],
          "traits": {
            "aws.api#service": {
               "sdkId": "License Manager",
              "arnNamespace": "license-manager",
              "cloudFormationName": "LicenseManager",
              "cloudTrailEventSource": "licensemanager.amazonaws.com",
              "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
              "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
              "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            },
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
```

```
            "parameters": {
                "Region": {
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                  "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send
 this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                  "type": "Boolean"
                },
                "Endpoint": {
                  "builtIn": "SDK::Endpoint",
                  "required": false,
                  "documentation": "Override the endpoint used to send this request",
                  "type": "String"
                }
            },
            "rules": [
                {
                  "conditions": [
                    {
                      "fn": "isSet",
                      "argv": [
                        {
                          "ref": "Endpoint"
                        }
                      ]

                    }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [
```

```
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {

"conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                 },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ]
        },
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
                {
```

```
                    "ref": "Region"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "aws.partition",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ],
                    "assign": "PartitionResult"
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref":
"UseFIPS"
                                },
                                true
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "type": "tree",
                    "rules": [
                        {
                            "conditions": [
                                {
```

```
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsFIPS"
                    ]

              }
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },

    "supportsDualStack"
                    ]
                  }
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                  "properties": {},
                  "headers": {}

            },
                "type": "endpoint"
              }
            ]
          },
          {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ]
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",

             "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,

        {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [

        {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
```

```
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ]
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this
partition does not support FIPS",
                    "type": "error"
                }
            ]
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "type": "tree",
             "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },

    "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
```

```
                                    "type": "tree",
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}

                                        },
                                            "type": "endpoint"
                                        }
                                    ]
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ]
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                                 "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ]
                }
            ]
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
```

```
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
```

```
        },
        {
          "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

     }
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
```

```
      },
      "params": {
        "Region": "ap-southeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-southeast-3",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      },

     "params": {
        "Region": "ca-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
        {
          "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
```

```
      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

"UseDualStack": false
      }
    },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
         }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }

  },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
```

```
            "Region": "us-east-2",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
          },
          "params": {

      "Region": "us-west-1",
            "UseFIPS": true,
            "UseDualStack": false
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          "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-2.amazonaws.com"
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          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": false,
            "UseDualStack": false
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        },
        {
          "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
```

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"expect": {
                    "endpoint": {
                      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-west-2",
                    "UseFIPS": true,
                    "UseDualStack": false
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                },
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-fips.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,

                    "UseDualStack": true
                  }
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                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
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                {
                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                    }
                  },
                  "params": {
```

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            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
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            "endpoint": {
              "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
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          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
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    {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
            }
           },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": false,
            "UseDualStack": false
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      }
    },
    {
      "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
      },

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        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
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      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
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            "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
           "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled
but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

      {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },

    "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
```

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                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,

      "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error":
 "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
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                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanager#AcceptGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
      "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

```
    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
          "httpResponseCode": 401
        },
        "smithy.api#documentation": "<p>Access to resource denied.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 401
      }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
      "type": "enum",
      "members": {
        "DISTRIBUTED_GRANTS_ONLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
          }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

   "type": "enum",
      "members": {
        "CREATE_GRANT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateGrant"
          }
        },
        "CHECKOUT_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
            "smithy.api#enumValue": "CheckoutLicense"
          }
        },
        "CHECKOUT_BORROW_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutBorrowLicense"
          }
        },
        "CHECK_IN_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckInLicense"
          }
        },
        "EXTEND_CONSUMPTION_LICENSE":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ExtendConsumptionLicense"
          }
        },
        "LIST_PURCHASED_LICENSES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ListPurchasedLicenses"
          }
        },
        "CREATE_TOKEN": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateToken"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max":
7
        }
      }
```

```
    },
    "com.amazonaws.licensemanager#Arn": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
      }
    },
    "com.amazonaws.licensemanager#ArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError":
{
          "code": "AuthorizationFailure",
          "httpResponseCode": 403
        },
        "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 403
      }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
      "type": "structure",
      "members": {
        "LastRunTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
          }
        }
      },
      "traits": {
```

```
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

 "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
              "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
          }
        },
        "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
          "type": "structure",
          "members": {
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>License beneficiary.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckInLicenseResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
              "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
```

```
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
```

```
            },
            "SignedToken": {
              "target": "com.amazonaws.licensemanager#SignedToken",
              "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicense": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n          <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
          "type": "structure",
          "members": {
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product
SKU.</p>",
                "smithy.api#required": {}
              }
            },
            "CheckoutType": {
              "target": "com.amazonaws.licensemanager#CheckoutType",
              "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>",
                "smithy.api#required": {}
              }
            },
```

```
        "KeyFingerprint": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        }
      },
      "traits": {

     "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
      "type": "structure",
      "members": {
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
```

```
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
           "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
      "PROVISIONAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PROVISIONAL"
        }
      },
      "PERPETUAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PERPETUAL"
        }
       }
    }
  },
  "com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 36
      }
    }
  },
  "com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 2048
      },
      "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "ConflictException",
```

```
            "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
          }
        },
        "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
          "type": "structure",
          "members": {
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
              }
            },
            "ConsumedLicenses": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
              }
            }
          },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
          }
        },
        "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
          }
        },
        "com.amazonaws.licensemanager#ConsumptionConfiguration": {
          "type": "structure",
          "members": {
            "RenewType": {
              "target": "com.amazonaws.licensemanager#RenewType",
              "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
              }
            },
            "ProvisionalConfiguration": {
              "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
              }
            },
            "BorrowConfiguration": {
              "target": "com.amazonaws.licensemanager#BorrowConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
```

```
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrantRequest": {
          "type": "structure",
          "members": {
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Principals": {
              "target": "com.amazonaws.licensemanager#PrincipalArnList",
              "traits": {
                "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n          <li>\n            <p>An Amazon Web Services
account, which includes only the account specified.</p>\n          </li>\n        </ul>\n        <ul>\n          <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n          </li>\n        </ul>\n
<ul>\n
          <li>\n            <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                "smithy.api#required": {}
              }
            },
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },

        "com.amazonaws.licensemanager#CreateGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateGrantVersion":
    {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
           },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

   "smithy.api#required": {}
            }
          },
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
```

```
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
              }
            }
          },
          "traits":
{
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicense": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n            <p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n            Dedicated Instance, Dedicated Host, or
            all of these), license affinity  to host (how long a \n            license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
           "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
          }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
          }
        },
        "LicenseRules": {
          "target":
 "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
```

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        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n            </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n              <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n            </li>\n            <li>\n              <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n              <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
              }
            },

  "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
```

generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
```

```
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region for the license.</p>",
            "smithy.api#required": {}

  }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>",
            "smithy.api#required": {}
          }
         },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
```

```
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target":
"com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License name.</p>",
                  "smithy.api#required": {}
               }
            },
            "ProductName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits":
{
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
```

```
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },

      {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT
token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits":
{
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n        JWT token.</p>",
            "smithy.api#required": {}
          }
        },
        "RoleArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n        License Manager does not check whether the roles are in use.</p>"
          }
        },
        "ExpirationInDays": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
          }
        },
        "TokenProperties": {
           "target": "com.amazonaws.licensemanager#MaxSize3StringList",
          "traits": {
            "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n        to the amr claim of the JWT token.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
      "type": "structure",
```

```
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",

       "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      },
      "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",
        "traits": {
          "smithy.api#documentation": "<p>Token type.</p>"
        }
      },
      "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
          "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
```

```
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the
grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
          },

        "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
          "type": "structure",
          "members":
{
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
```

```
"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Token ID.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteTokenResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}

         }
        },
        "com.amazonaws.licensemanager#DigitalSignatureMethod": {
          "type": "enum",
          "members": {
            "JWT_PS384": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "JWT_PS384"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#Entitlement": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target":
"com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementData": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement data name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement
data value.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {

"smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "None"
              }
            },
            "SECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Seconds"
              }
            },
            "MICROSECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Microseconds"
              }
            },
            "MILLISECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Milliseconds"
              }
```

```
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabits"
```

```
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

}
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "Terabytes/Second"
              }
            },
            "BITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bits/Second"
              }
            },
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },
            "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
              }
            },
            "COUNT_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count/Second"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#EntitlementList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
          }
        },
```

```
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
```

```
"BYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Bytes"
   }
},
"KILOBYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
},
"MEGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Megabytes"
   }
},
"GIGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Gigabytes"
   }
},
"TERABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Terabytes"
   }
},
"BITS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Bits"
   }
},
"KILOBITS": {
   "target": "smithy.api#Unit",
   "traits": {

    "smithy.api#enumValue": "Kilobits"
   }
},
"MEGABITS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Megabits"
   }
```

```
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"
          }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }
        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
                }
            },

        "TERABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits/Second"
                }
            },
            "COUNT_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count/Second"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
          },
          "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

          "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}

    }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,
            "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

```
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },

        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        },
        "ErrorCode": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "FailedDependency",
          "httpResponseCode": 424
        },
        "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 424
      }
    },
    "com.amazonaws.licensemanager#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#FilterName",
          "traits": {
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```
                "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
              }
            },
            "Values": {
              "target": "com.amazonaws.licensemanager#FilterValues",
              "traits": {
                "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanager#FilterLimitExceededException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "FilterLimitExceeded",
              "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#FilterList": {
          "type": "list",
           "member": {
            "target": "com.amazonaws.licensemanager#Filter"
          }
        },
        "com.amazonaws.licensemanager#FilterName": {
          "type": "string"
        },
        "com.amazonaws.licensemanager#FilterValue": {
          "type": "string"
        },
        "com.amazonaws.licensemanager#FilterValues": {
          "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
```

```
        "type": "structure",
        "members": {
          "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
              "smithy.api#required": {}
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
          "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
```

```
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrantResponse": {
      "type": "structure",
      "members": {
```

```
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
```

```
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits":
 {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurationId": {
```

```
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
```

```
    "ConsumedLicenses": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License configuration status.</p>"
      }

  },
    "OwnerAccountId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
      }
    },
    "ConsumedLicenseSummaryList": {
      "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
      }
    },
    "ManagedResourceSummaryList": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
      }
    },
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
       "traits": {
        "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
      }
    },
    "ProductInformationList": {
      "target": "com.amazonaws.licensemanager#ProductInformationList",
      "traits": {
        "smithy.api#documentation": "<p>Product information.</p>"
      }
    },
    "AutomatedDiscoveryInformation": {
      "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
      "traits": {
        "smithy.api#documentation": "<p>Automated discovery information.</p>"
      }
```

```
            },
            "DisassociateWhenNotFound": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTask": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
         "type": "structure",
         "members": {
            "LicenseConversionTaskId": {
               "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
```

```
            "traits": {
                "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

          },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                "smithy.api#required":
{}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {
            "ReportGenerator": {
              "target": "com.amazonaws.licensemanager#ReportGenerator",
              "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
              }
            }
          },
```

```
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
          "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },

    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {

  "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
```

```
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "S3BucketArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
```

```
discovery data,\n        and so on.</p>"

  }
          },
          "SnsTopicArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
            }
          },
          "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
          },
          "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

        },
          "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
```

```
 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>",
              "smithy.api#required": {}
            }
          },
          "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Parent ARN.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>",
              "smithy.api#required": {}
            }
          },
          "GranteePrincipalArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantStatus": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>",
              "smithy.api#required": {}
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Granted operations.</p>",
              "smithy.api#required": {}
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
```

```
            },
            "REJECTED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ACTIVE"
               }
            },
            "FAILED_WORKFLOW": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "FAILED_WORKFLOW"
               }
            },
            "DELETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DELETED"
               }
            },
            "PENDING_DELETE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "PENDING_DELETE"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
               "traits":
{
                  "smithy.api#enumValue": "DISABLED"
               }
            },
            "WORKFLOW_COMPLETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "WORKFLOW_COMPLETED"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
```

```
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

},
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

           }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>Granted license status.</p>"
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

    }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidResourceState",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }

    },
        "traits": {
          "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
```

```
            "EQUALS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EQUALS"
              }
            },
            "NOT_EQUALS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
              }
            },
            "BEGINS_WITH": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
              }
            },
            "CONTAINS": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "CONTAINS"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#InventoryFilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
          }
        },
        "com.amazonaws.licensemanager#Issuer": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>",
                "smithy.api#required": {}
              }
            },
            "SignKey": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
```

```
of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
            }
          },
          "com.amazonaws.licensemanager#IssuerDetails": {
            "type": "structure",
            "members": {
              "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Issuer name.</p>"
                }
              },
              "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
              },
              "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
            }
          },
          "com.amazonaws.licensemanager#License": {
            "type": "structure",
            "members": {
              "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
              },
              "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
"smithy.api#documentation": "<p>License name.</p>"
        }
      },
      "ProductName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product name.</p>"
        }
      },
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product SKU.</p>"
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>License issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

      "smithy.api#documentation": "<p>Home Region of the license.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "Validity": {
        "target": "com.amazonaws.licensemanager#DatetimeRange",
        "traits": {
          "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
        }
      },
      "Beneficiary": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License beneficiary.</p>"
        }
      },
```

```
            "Entitlements": {

  "target": "com.amazonaws.licensemanager#EntitlementList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
              }
            },
            "ConsumptionConfiguration": {
              "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
              }
            },
            "LicenseMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
              }
            },
            "CreateTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>License
creation time.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseConfiguration": {
          "type": "structure",
          "members": {
            "LicenseConfigurationId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
              }
            },
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ConsumedLicenses": {
```

```
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
          },
          "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

          }
          },
          "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
```

```
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
```

```
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
            }
          },

    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
          "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
              "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
          }
        },
```

```
      "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
          }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
          }
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
          }
        },
        "DestinationLicenseContext": {
          "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the conversion task.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
          }
        },
```

```
            "StartTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
               }
            },
            "LicenseConversionTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
               }
            },
            "EndTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
         "type": "string",
         "traits": {

          "smithy.api#length": {
               "min": 0,
               "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
         }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
         "type": "enum",
         "members": {
            "IN_PROGRESS": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "IN_PROGRESS"
               }
            },
            "SUCCEEDED": {
               "target": "smithy.api#Unit",
               "traits": {
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```
                "smithy.api#enumValue": "SUCCEEDED"
              }
            },
            "FAILED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "FAILED"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseConversionTasks":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
          }
        },
        "com.amazonaws.licensemanager#LicenseCountingType": {
          "type": "enum",
          "members": {
            "VCPU": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "vCPU"
              }
            },
            "INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Instance"
              }
            },
            "CORE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Core"
              }
            },
            "SOCKET": {
              "target": "smithy.api#Unit",
               "traits": {
                "smithy.api#enumValue": "Socket"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseDeletionStatus": {
```

```
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
    }
  },
  "com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Resource type.</p>"
        }
      },
      "ErrorMessage": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Error message.</p>"
        }
      },
      "FailureTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
```

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      "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
          },
          "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
            }
          },
          "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Reserved.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

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            "smithy.api#required": {}
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
      },
      "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE": {
            "target": "smithy.api#Unit",

          "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
          },
          "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DEACTIVATED"
            }
          },
          "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUSPENDED"
```

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            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
```

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            "httpResponseCode": 412
          },
          "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 412
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the resource associations for the specified license configuration.</p>\n          <p>Resource associations need not consume licenses from a license configuration. \n          For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules).</p>"
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
```

```
      "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
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</li>\n <li>\n <p>\n <code>GrantStatus</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

      "traits": {
              "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
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            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
          },
          "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
```

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

   "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

           "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
          "type": "structure",
          "members": {
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {

      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTasks": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configuration tasks for your
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account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

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        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits":
{
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
      "type": "structure",
      "members": {
        "LicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
          }
        },
        "NextToken": {
           "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
      },
      "errors": [
```

```
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
```

```
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
```

```
specifying the\n        recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target":
 "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
           },
           {

     "target": "com.amazonaws.licensemanager#ServerInternalException"
           },
           {
              "target": "com.amazonaws.licensemanager#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
     },
     "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
           "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                 "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
           </p>\n          </li>\n        </ul>"
              }
           },
```

```
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
         "traits": {
          "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
      "LicenseArns": {
        "target": "com.amazonaws.licensemanager#ArnList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
        }
      },
```

```
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#InventoryFilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
 </li>\n <li>\n <p>\n <code>application_name</code> - The name of the
application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
 </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n
 Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values
are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-
server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n
 <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n
 <code>resource_id</code> - The ID of the resource. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
 <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
 about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the tags.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokens": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTokensRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTokensResponse"
      },
      "errors":
[
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists your tokens.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
      "type": "structure",
      "members": {
```

```
        "TokenIds": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {

            "smithy.api#documentation": "<p>Token IDs.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
      "type": "structure",
      "members": {
        "Tokens": {
          "target": "com.amazonaws.licensemanager#TokenList",
          "traits": {
            "smithy.api#documentation": "<p>Received token details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
           {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>resourceArn</code> - The ARN of the license configuration resource.\n              Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n              Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>resourceAccount</code> - The ID of the account that owns the resource. \n              Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
          "type": "structure",
          "members": {

            "LicenseConfigurationUsageList": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
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                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#Location": {
          "type": "string"
        },
        "com.amazonaws.licensemanager#Long": {
          "type": "long"
        },
        "com.amazonaws.licensemanager#ManagedResourceSummary": {
          "type": "structure",
          "members": {
            "ResourceType":
{
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
              }
            },
            "AssociationCount": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
          }
        },
        "com.amazonaws.licensemanager#MaxSize100": {

        "type": "integer",
          "traits": {
            "smithy.api#range": {
              "min": 1,
              "max": 100
```

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
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            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n          <ul>\n             <li>\n                <p>As a license administrator, you can optionally specify an\n                   <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n             </li>\n             <li>\n                <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                   account in your organization.</p>\n             </li>\n             <li>\n                <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                   <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                   are activating the grant.</p>\n             </li>\n          </ul>\n          <dl>\n             <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n             <dd>\n                <p>Use this value to activate a grant without replacing any member accounts\n                   active grants for the same product.</p>\n             </dd>\n             <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n             <dd>\n                <p>Use this value to activate a grant and disable other active grants in any\n                   member accounts
 for the same product. This action will also replace their\n                   previously activated grants with this activated grant.</p>\n             </dd>\n          </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n          override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
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            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
```

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes product information for a license configuration. "
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Filter name. ",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

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      "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
          }
        },
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
      }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
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            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
              "code": "RateLimitExceeded",
              "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
 status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

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            },
            "PENDING_ACCEPT": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue":
"PENDING_ACCEPT"
               }
            },
            "REJECTED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "REJECTED"
               }
            },
            "ACTIVE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ACTIVE"
               }
            },
            "FAILED_WORKFLOW": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "FAILED_WORKFLOW"
               }
            },
            "DELETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DELETED"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "DISABLED"
               }
            },
            "WORKFLOW_COMPLETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "WORKFLOW_COMPLETED"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#RedirectException": {
         "type": "structure",
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      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

```
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
          "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
```

```
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "MONTH"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
          },
```

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            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
                }
            },
            "LastRunStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
                }
            },
            "LastRunFailureReason":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
                }
            },
            "LastReportGenerationTime": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
                }
            },
            "ReportCreatorAccount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
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generator.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",

        "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "S3Location": {
                "target": "com.amazonaws.licensemanager#S3Location",
                "traits": {
                    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Time the report was created.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
                }

      }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportGenerator"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorName": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
```

```
        }
      },
      "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
          "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

      },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
```

```
        "Platform": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Platform of the resource.</p>"
          }
        },
        "PlatformVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
          }
        },
        "ResourceOwningAccountId":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
      }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ResourceLimitExceeded",

           "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
```

```
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

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                    "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
```

```
            }
          }
        },
        "com.amazonaws.licensemanager#StatusReasonMessage": {
          "type": "string",
          "traits":
{
            "smithy.api#length": {
              "min": 0,
              "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
          }
        },
        "com.amazonaws.licensemanager#String": {
          "type": "string"
        },
        "com.amazonaws.licensemanager#StringList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "com.amazonaws.licensemanager#Tag": {
          "type": "structure",
          "members": {
            "Key": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Tag key.</p>"
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation":
"<p>Tag value.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#TagKeyList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#String"
```

```
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

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format.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

          "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
```

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            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

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            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseConfigurationStatus": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
              "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"
              }
            },
            "LicenseRules": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
              }
            },
            "LicenseCount": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
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                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
              }
            },
            "LicenseCountHardLimit": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
              }
            },
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            }
          },
          "traits":
 {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
```

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    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
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update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n
License configuration report - Reports the number and details of consumed licenses for a license
configuration. \n \n \n Resource report - Reports the tracked licenses and
resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
```

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        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
```

```
            }
          },
          "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

       }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
  }
```

1.28 aws-sdk-go-v2-internal-ini 1.8.3

1.28.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
```

```
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string
```

```
// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

```
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
 Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
```

```
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
```

```
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
   "smithy": "2.0",
   "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
         "type": "structure",
         "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
```

```
            },
            "DomainIpv4List": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
               "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 2
                  }
               }
            },
            "DomainCredentialsProvider": {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
               }
            },
            "DomainNetworkSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
               },
               {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
               }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
```

```
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
```

```
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

           "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
```

```
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}

        }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation":
 "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
```

\n\t\t\tcriteria, such as tags, attributes, or IDs. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
            "traits": {

              "smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Refers to an identity provider. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
              "smithy.api#required": {}
            }
          },
          "Settings": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",

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            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the identity provider.</p>",

       "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
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```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
            "traits":
{
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

 "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
               }

  },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
              }
            },
            "DisassociationDate": {
              "target": "smithy.api#String",
              "traits": {

            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server",
             "smithy.api#httpError": 500
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

},
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
   },
   {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
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      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
   },
   {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
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              "content-type",
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              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",
              "x-api-key",

      "authorization",
              "x-amz-date",
              "x-amz-security-token",
              "Access-Control-Allow-Headers",
              "Access-Control-Allow-Methods",
              "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
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            "parameters": {
              "Region": {
                "builtIn":
 "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured
 endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
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            },
            "rules": [
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                "conditions": [
                  {
                    "fn": "isSet",
                    "argv": [
                      {
                        "ref": "Endpoint"
                      }
                    ]
                  }
                ],

            "rules": [
                    {
                      "conditions": [
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```
                {
                  "fn": "booleanEquals",
                  "argv": [
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                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

"fn": "booleanEquals",
                  "argv": [
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                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},

               "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
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          {
            "conditions": [
              {
                "fn": "isSet",
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                "argv": [
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                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
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                "conditions": [
                  {
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                    "argv":
[
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
                          true

        ]
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                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
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                {
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                  "argv": [
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                      "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                  ]
                }
              ]
            },

    {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
                  }
                ]

              }
            ],
            "rules": [
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                  "properties": {},
                  "headers": {}
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                "type": "endpoint"
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        "type": "tree"
                    },
```

```
                                {
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                                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                                    "type": "error"
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                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                }
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                                    "conditions": [
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                                            "fn": "booleanEquals",
                                            "argv": [
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsFIPS"
                                                    ]
                                                },
                                                true
                                            ]
                                        }
                                    ],
                                    "rules": [
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                                            "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",
```

```
                    "properties": {},
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              "error": "FIPS is enabled but this partition does not support FIPS",
              "type": "error"
            }

  ],
      "type": "tree"
    },
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      "conditions": [
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            },
            true
          ]
        }
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          "conditions": [

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              "argv": [
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                {
                  "fn": "getAttr",
                  "argv": [
                    {
                      "ref": "PartitionResult"
                    },
                    "supportsDualStack"
                  ]
                }
```

```
                    ]
                        }
                    ],
                    "rules": [
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                            "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                     "type": "tree"
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                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
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        {
            "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                 "headers": {}
            },
            "type": "endpoint"
        }
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},
{
 "conditions": [],
 "error": "Invalid Configuration: Missing Region",
 "type": "error"
}
]
},
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"smithy.rules#endpointTests": {
  "testCases": [
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,

  "UseDualStack": false
        }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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    "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
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              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
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              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
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1.api.amazonwebservices.com.cn"
                }
              },
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                "UseFIPS": true,
                "UseDualStack":
true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
              },
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                "UseFIPS": false,
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            "UseDualStack": true
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          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
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            "endpoint": {
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            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack":
false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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        },
        {
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            }
          },
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            "UseFIPS": true,
            "UseDualStack": false
          }
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          "expect": {
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          "UseDualStack":
true
        }
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          "UseDualStack": false
        }
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        "expect": {
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does not support one or both"
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
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        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
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          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
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                "params": {
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                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                  }
                },

        "params": {
                  "Region": "us-iso-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
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              {
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

    "expect": {
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                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
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            "UseDualStack": false
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        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,

      "UseDualStack": true
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        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {

              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
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                        "url": "https://example.com"
                    }
                },
                "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint":
"https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
```

```
        "members": {
            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
            },
            "HealthStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
 server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation":
```

```
 "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
                }
            }
        },
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```
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
{
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
                     "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
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```
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
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        "traits": {
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              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
```

```
            "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
```

```
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
      <ul>\n          <li>\n              <p>Product</p>\n          </li>\n          <li>\n              <p>DirectoryId</p>\n
    </li>\n       </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {

        "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that
contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {

 "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n            <li>\n                <p>InstanceId</p>\n
            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
```

```
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
             "traits": {
               "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
             }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                 "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type":
 "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {

                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"

          }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to
 retrieve additional objects.</p>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

       }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
```

```
"smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
```

```
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required":
{}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline
```

```
results:</p>\n        <ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n
<p>Username</p>\n          </li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
             "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
```

```
        }
      },
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
          "smithy.api#required": {}
        }
      },
      "Status": {
        "target": "smithy.api#String",

        "traits": {
          "smithy.api#documentation": "<p>The status of a product for this user.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductUserArn": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
        }
      },
      "StatusMessage": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
        }
      },
      "Domain": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The domain name of the  Active Directory
that contains the user information for the product subscription.</p>"
        }
      },
      "SubscriptionStartDate": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The start date of a subscription.</p>"
        }
```

```
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
         "type":
 "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
 \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",

           "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
{
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
```

```
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StartProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
         "type":
 "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
```

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| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
```

```
"errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],

   "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An
```

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object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
 domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
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    "member": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResource": {

  "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },

    "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
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        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

     },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
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            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {

  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },

  "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
               }
            },
            "UpdateSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
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                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {

  "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
                "smithy.api#required": {}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
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```
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
      }
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
```

```
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
```

```
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
```

```
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

```
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
```

```
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
 err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
```

```
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
```

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
```

```
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
```

registered to your account. ",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation":
 " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request. "
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": " The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request. "
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
```

```
            "target": "smithy.api#String",

    "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
```

```
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
```

```
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

```
                "argv": [
                  {

              "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

    ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"

        },
                              "supportsFIPS"
                          ]
                        }
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [

                           {
                                "ref": "PartitionResult"
```

```
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

          "fn": "booleanEquals",
                      "argv": [
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        },
                        true

                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled
```

```
but this partition does not support FIPS",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true

                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "rules": [

        {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
```

```
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"

                            }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
```

```
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
```

```
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

        },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
```

```
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {

               "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                  },
                  "params": {
                    "Region": "us-iso-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
          },
```

```
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

     "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }

},
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
```

```
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {

                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {

 "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

    },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n            <li>\n
  <p>\n                <code>AccountID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
```

<code>InstanceType</code>\n \n \n \n \n
<code>ProductCode</code>\n \n \n \n \n
<code>Region</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n            <p>\n               <code>Subscription</code>\n            </p>\n         </li>\n      </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>equals</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n         </li>\n      </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "Subscriptions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
               }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
          "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }

  },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },

       "NextToken": {
          "target": "smithy.api#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {

         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
```

```
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
```

```
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                "smithy.api#required": {}
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
              }
```

```
            },
            "SubscriptionProviderArn": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
         "type": "structure",
         "members": {
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
               "traits": {
                  "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },

      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
```

```
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

   "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
```

```
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
```

```
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

```
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

         },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                   "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }
             },
             "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                   "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
             },
             "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                   "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

       },
             "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                   "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
             }
          }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
             "message": {
                "target": "smithy.api#String"
             }
          },
          "traits": {
             "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
             "smithy.api#error": "client"
          }
       }
    }
}
ListLicenses
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string
```

```
 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
```

```
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
```

```
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
     },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
```

```
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseUsage"
  },
  {
    "target": "com.amazonaws.licensemanager#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
   },
  {
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {

   "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
```

```
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListResourceInventory"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
```

```
        "sdkId": "License Manager",
        "arnNamespace": "license-manager",
        "cloudFormationName": "LicenseManager",
        "cloudTrailEventSource": "licensemanager.amazonaws.com",
        "endpointPrefix": "license-manager"
      },
      "aws.auth#sigv4": {
        "name": "license-manager"
      },
      "aws.protocols#awsJson1_1": {},
      "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
      "smithy.api#title": "AWS License Manager",
      "smithy.api#xmlNamespace": {
        "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
      },
      "smithy.rules#endpointRuleSet": {
        "version": "1.0",
        "parameters": {
          "Region": {
            "builtIn": "AWS::Region",
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send
 this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
```

```
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]

          }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {

"conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
```

```
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
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            "rules": [
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                    "fn": "aws.partition",
                    "argv": [
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                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
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                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref":
"UseFIPS"
                          },
```

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                true
              ]
            },
            {
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              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
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                  "argv": [
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                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]

                    }
                  ]
                },
                {
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                  "argv": [
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                    {
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                      "argv": [
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                          "ref": "PartitionResult"
                        },

"supportsDualStack"
                      ]
                    }
                  ]
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                }
            ],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}

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                    "type": "endpoint"
                }
            ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
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    },
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            "argv": [
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                    },
                    true
                ]
            }
        ],
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        "rules": [
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                    {
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                        "argv": [
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                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    }
                ],
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                "rules": [

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                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
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partition does not support FIPS",
                "type": "error"
            }
        ]
    },
    {
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                "argv": [
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                    },
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                ]
            }
        ],
        "type": "tree",
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                          true,
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                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

    "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}

                },
                      "type": "endpoint"
                    }
                  ]
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
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                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
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                "headers": {}
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```
                        },
                        "type": "endpoint"
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                    ]
                  }
                ]
              },
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                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ]
          },
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            "testCases": [
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                "expect": {
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{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "af-south-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
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                  "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "ap-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                 }
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                "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
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```
            }
          },
          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
          }
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          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
          },
          "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

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          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "expect": {
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}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
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        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },
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        "UseFIPS": false,
        "UseDualStack": false
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      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
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        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
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    {
      "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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    {
      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
      "expect": {

      "endpoint": {
          "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

 "UseDualStack": false
      }
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    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
```

```
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
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    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
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    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }

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    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
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      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
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      "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
      },
      "params": {
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            "Region": "us-west-1",
                "UseFIPS": true,
                "UseDualStack": false
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            "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-west-2.amazonaws.com"
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            },
            "params": {
              "Region": "us-west-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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                "url": "https://license-manager-fips.us-west-2.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-west-2",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,

              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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                "expect": {
                  "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-northwest-1",
                  "UseFIPS": false,
                  "UseDualStack": false

    }
              },
              {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
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            "UseFIPS": true,
            "UseDualStack": true
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        },
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          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
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        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },

    {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
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```
                "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-gov-west-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-west-1",
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              "UseDualStack": false
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          {
            "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
            "expect": {
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            },
            "params": {
              "Region": "us-gov-west-1",
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              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
              }
            },

    "params": {
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              "UseFIPS": true,
              "UseDualStack": true
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      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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        }
      },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
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        "UseFIPS": true,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
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            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

      {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
```

```
                },

        "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
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                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "UseFIPS": false,

      "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
```

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                },
                {
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                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
          "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
          },
          "errors": [
            {
```

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            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"

}
      ],
      "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant
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ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

 "code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
```

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            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
```

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{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
        },
        "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 403
      }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
      "type": "structure",
      "members": {
        "LastRunTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes automated discovery.</p>"
      }
    },

  "com.amazonaws.licensemanager#Boolean": {
      "type": "boolean",
      "traits": {
        "smithy.api#default": false
      }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
      "type": "structure",
      "members": {
        "AllowEarlyCheckIn": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
              "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
          "type": "structure",
          "members":
{
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                "smithy.api#required": {}
              }
```

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            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                "smithy.api#required": {}
              }
            },
            "DigitalSignatureMethod": {
              "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
              "traits": {
                "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                "smithy.api#required": {}
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
              }
            },
            "EntitlementsAllowed":
{
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "SignedToken": {
              "target": "com.amazonaws.licensemanager#SignedToken",
              "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            }
          },
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Checks out the specified license.</p>\n      <note>\n      <p>If the
account that created the license is the same that is performing the check out, you must\n      specify the account
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as the beneficiary.</p>\n        </note>"
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
 SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
              "smithy.api#documentation": "<p>Checkout type.</p>",
              "smithy.api#required": {}
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",

      "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
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```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
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            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
           }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
```

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    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },
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"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
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            {
               "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n         entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateGrantRequest": {
         "type": "structure",
         "members": {
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                  "smithy.api#required": {}
               }
            },
            "GrantName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant name.</p>",
                  "smithy.api#required": {}

   }
            },
            "LicenseArn": {
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```
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
              "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n <ul>\n\n <li>\n <p>An organization, which will include all accounts across your organization.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
```

```
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

   "smithy.api#required": {}
            }
          },
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
             "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
```

```
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
       },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a license configuration.</p>\n      <p>A license configuration is an abstraction of a customer license agreement that can be\n      consumed and enforced by License Manager. Components include specifications for the license\n      type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n      Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n      license must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
        },
        "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n        <li>\n            <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n        </li>\n
<li>\n
  <p>\n            <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n        </li>\n    </ul>\n    <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
        },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
```

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
         "type": "structure",
         "members": {
            "ResourceArn": {

               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                  "smithy.api#required": {}
               }
            },
            "SourceLicenseContext": {
               "target": "com.amazonaws.licensemanager#LicenseConversionContext",
               "traits": {
                  "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                  "smithy.api#required": {}
               }
            },
            "DestinationLicenseContext":
{
               "target": "com.amazonaws.licensemanager#LicenseConversionContext",
               "traits": {
                  "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

    "traits": {
          "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "ReportGeneratorName":
{
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}

      }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
```

```
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region for the license.</p>",
            "smithy.api#required": {}

  }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
```

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

```
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license.</p>"
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n        running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n        usage.</p>",
            "smithy.api#required": {}
          }
        },

  "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>",
            "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>"
          }
        }
      },
      "traits": {
```

```
"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output":
{}
      }
    },
    "com.amazonaws.licensemanager#CreateToken": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

      {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n         <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateTokenRequest": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits":
{
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                  "smithy.api#required": {}
               }
            },
            "RoleArns": {
               "target": "com.amazonaws.licensemanager#ArnList",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
               }
            },
            "ExpirationInDays": {
               "target": "com.amazonaws.licensemanager#Integer",
               "traits": {
                  "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
               }
```

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
```

```
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
```

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                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
```

```
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n         <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

```
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

      {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
         }
      },
      "com.amazonaws.licensemanager#DeleteTokenRequest": {
         "type": "structure",
         "members": {
            "TokenId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token ID.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}

       }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
         "type": "enum",
         "members": {
            "JWT_PS384": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "JWT_PS384"
               }
```

```
            }
          }
        },
        "com.amazonaws.licensemanager#Entitlement": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target":
"com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
```

```
"NONE": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "None"
   }
},
"SECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Seconds"
   }
},
"MICROSECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Microseconds"
   }
},
"MILLISECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Milliseconds"
   }
},
"BYTES": {
   "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
   }
},
"KILOBYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Kilobytes"
   }
},
"MEGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Megabytes"
   }
},
"GIGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Gigabytes"
   }
},
```

```
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }
        },
        "BYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
```

```
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
      }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
             }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes"
            }
          },
          "BITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {

             "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }
          },
          "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
```

```
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

  "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

```
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}

    }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,
            "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },

        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
      "type": "structure",
      "members": {
        "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          },
          "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
          },
          "smithy.api#documentation":
 "<p>A dependency required to run the API is missing.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 424
        }
      },
      "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanager#FilterValues",
            "traits": {
              "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n        describe operation. Filters can be used
to match a set of resources by specific criteria,\n        such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
```

```
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n        are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Temporary access token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
```

```
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
         "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
      "Grant": {
        "target": "com.amazonaws.licensemanager#Grant",
        "traits": {
          "smithy.api#documentation": "<p>Grant details.</p>"
        }
      }
    },
    "traits": {

  "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
```

```
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"

        },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }

    },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
```

```
            "ManagedResourceSummaryList": {
               "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                  "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
               }
            },
            "ProductInformationList": {
               "target": "com.amazonaws.licensemanager#ProductInformationList",
               "traits": {
                  "smithy.api#documentation": "<p>Product information.</p>"
               }
            },
            "AutomatedDiscoveryInformation": {
               "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
               "traits": {
                  "smithy.api#documentation": "<p>Automated discovery information.</p>"
               }
            },
            "DisassociateWhenNotFound": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTask": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

  "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
         "type": "structure",
         "members": {
            "LicenseConversionTaskId": {
               "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
               "traits": {
                  "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
       },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
         "type": "structure",
         "members": {
            "LicenseConversionTaskId": {
               "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
               "traits": {
                  "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
               }
            },
            "ResourceArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
```

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "ReportGenerator": {
            "target": "com.amazonaws.licensemanager#ReportGenerator",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
  },
  "com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
      "License": {
        "target": "com.amazonaws.licensemanager#License",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {

"target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

 }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n         provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

```
"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                 }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
```

```
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

          }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
```

```
            },
            "PENDING_DELETE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "PENDING_DELETE"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
               "traits":
{
                  "smithy.api#enumValue": "DISABLED"
               }
            },
            "WORKFLOW_COMPLETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "WORKFLOW_COMPLETED"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
               }
            },
            "LicenseName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License name.</p>"
               }

   },
            "ProductName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Product name.</p>"
               }
            },
            "ProductSKU": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>Granted license issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

       }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>Granted license status.</p>"
        }
      },
      "Validity": {
        "target": "com.amazonaws.licensemanager#DatetimeRange",
        "traits": {
          "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
        }
      },
      "Beneficiary": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
        }
      },
      "Entitlements": {
        "target": "com.amazonaws.licensemanager#EntitlementList",
         "traits": {
          "smithy.api#documentation": "<p>License entitlements.</p>"
        }
      },
      "ConsumptionConfiguration": {
        "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
        "traits": {
          "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
        }
      },
      "LicenseMetadata": {
        "target": "com.amazonaws.licensemanager#MetadataList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
          },
          "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
              "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
      },
      "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
      },
      "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
```

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidParameterValueProvided",
          "httpResponseCode": 400
        },
        "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResourceState",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
```

```
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

},
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CONTAINS"
          }
        }
      }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
      }
    },
    "com.amazonaws.licensemanager#Issuer": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>",
            "smithy.api#required": {}
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>"
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        },
        "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

           "smithy.api#documentation": "<p>License name.</p>"
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
        "smithy.api#documentation": "<p>Home Region of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>License metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>License
 creation time.</p>"
          }
        },
```

```
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
      "type": "structure",
      "members": {
        "LicenseConfigurationId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
          }
        },
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
          }
        },
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
           }
        },
        "LicenseRules": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
          },
          "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

         }
          },
          "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
      "type": "structure",
      "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
```

```
            },
            "AssociationTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {

      "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
               }
            },
            "AmiAssociationScope": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
         "type": "enum",
         "members":
 {
            "AVAILABLE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "AVAILABLE"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DISABLED"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
         "type": "structure",
         "members": {
            "ResourceArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
          },

      "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
          "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
              "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
          },
          "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
      "type": "string",
      "traits": {

     "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
      "type": "enum",
      "members": {
        "IN_PROGRESS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "IN_PROGRESS"
          }
        },
        "SUCCEEDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUCCEEDED"
          }
        },
        "FAILED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
      }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
      "type": "enum",
      "members": {
        "VCPU": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "vCPU"
          }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

```
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
              }
            },
            "ErrorMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
              }
            },
            "FailureTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {

        "smithy.api#documentation": "<p>Failure time.</p>"
              }
            },
            "OperationName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
              }
            },
            "OperationRequestedBy": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
              }
            },
            "MetadataList": {

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailureList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecification": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecifications": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
          }
        },
        "com.amazonaws.licensemanager#LicenseStatus": {
          "type": "enum",
          "members": {
            "AVAILABLE": {
```

```
            "target": "smithy.api#Unit",

        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },
        "PENDING_AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
          }
        },
        "DEACTIVATED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
          }
        },
        "SUSPENDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUSPENDED"
          }
        },
        "EXPIRED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EXPIRED"
          }
        },

      "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
  },
  "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
```

```
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
 configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
 the license rules).</p>"
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
          "type": "structure",
```

```
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
```

```
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
              "smithy.api#documentation": "<p>Distributed grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
      },
      "errors": [
        {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
      }
```

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
      },

   "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
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                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n       Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n       Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       <li>\n
<p>\n       <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n       Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
  </li>\n       <li>\n       <p>\n       <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurations": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurations",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",

             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
```

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    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

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            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTasks": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target":
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"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits":
{
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
```

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
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                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
              },
              {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
          },
          "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
              "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                  "smithy.api#required": {}
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
              },
              "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#input": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
            "type": "structure",
            "members": {
              "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                  "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
              },
```

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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
               "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
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      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
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for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
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            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n      (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n          <li>\n              <p>\n                  <code>ParentArn</code>\n              </p>\n          </li>\n
<li>\n              <p>\n                  <code>GranteePrincipalArn</code>\n              </p>\n          </li>\n      </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

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    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n
      </li>\n        <li>\n          <p>\n            <code>LicenseIssuerName</code>\n          </p>\n
</li>\n        <li>\n          <p>\n            <code>LicenseArn</code>\n          </p>\n        </li>\n
<li>\n          <p>\n            <code>GrantStatus</code>\n          </p>\n        </li>\n        <li>\n
<p>\n
      <code>GranterAccountId</code>\n          </p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
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        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

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            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
          </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },

           "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
          "type": "structure",
```

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

     "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#InventoryFilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n        <li>\n        <p>\n        <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n        Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
        </li>\n        <li>\n        <p>\n        <code>application_name</code> - The name of the
application. \n        Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
    </li>\n        <li>\n        <p>\n        <code>license_included</code> - The type of license included. \n
        Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n        Possible values
are <code>sql-server-enterprise</code> | \n        <code>sql-server-standard</code> | \n        <code>sql-
server-web</code> |  \n        <code>windows-server-datacenter</code>.</p>\n        </li>\n        <li>\n
    <p>\n        <code>platform</code> - The platform of the resource.\n        Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n        </li>\n        <li>\n        <p>\n
      <code>resource_id</code> - The ID of the resource. \n        Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n        <li>\n        <p>\n
    <code>tag:<key></code> - The key/value combination of a tag assigned \n        to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n        <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n        </li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
```

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    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

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        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

      "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
         "type": "structure",
         "members": {
            "TokenIds": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
      <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#MaxSize100",
               "traits": {
                  "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
               }
            }
         },
         "traits": {
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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
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            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n            consumption details by resource at a selected point in time. Use this action to audit the\n            current license consumption for any license inventory and configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n            are supported:</p>\n            <ul>\n              <li>\n                <p>\n                  <code>resourceArn</code> - The ARN of the license configuration resource.\n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n              <li>\n                <p>\n                  <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n              <li>\n                <p>\n                  <code>resourceAccount</code> - The ID of the account that owns the resource. \n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n            </ul>"
              }
            }
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        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Location": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#Long": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
          "ResourceType":
{
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
          },
          "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
          }
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    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
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            "traits": {
              "smithy.api#documentation": "<p>The value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
      },
      "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Metadata"
        }
      },
      "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
          "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
              "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n          <code>Status</code> parameter.</p>\n          <ul>\n            <li>\n              <p>As a license administrator, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n            </li>\n            <li>\n              <p>As a grantor, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                account in your organization.</p>\n            </li>\n            <li>\n              <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                are activating the grant.</p>\n            </li>\n          </ul>\n          <dl>\n            <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n            <dd>\n              <p>Use this value to activate a grant without replacing any member accounts\n                active grants for the same product.</p>\n            </dd>\n            <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n            <dd>\n              <p>Use this value to activate a
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grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterList": {
              "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
              "traits": {
                "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n              <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n              <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n              <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n          is
<code>RDS</code>:</p>\n          <ul>\n            <li>\n              <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>License Pack</code> - The license
pack.\n                Logical operator is <code>EQUALS</code>.\n                Possible values are: <code>data
guard</code> | \n                <code>diagnostic pack sqlt</code> | \n
            <code>tuning pack sqlt</code> | \n                <code>ols</code> | \n                <code>olap</code>.</p>\n
    </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
```

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

```
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
 status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
```

```
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
             "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#RejectGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}

  }
        },
        "com.amazonaws.licensemanager#RejectGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
```

```
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
```

```
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is generated.  \n         The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

              "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly, or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
```

```
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
                }
            },
            "LastRunStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
                }
```

```
            },
            "LastRunFailureReason":
 {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
               }
            },
            "LastReportGenerationTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
               }
            },
            "ReportCreatorAccount": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",

         "traits": {
                  "smithy.api#documentation": "<p>Description of the report generator.</p>"
               }
            },
            "S3Location": {
               "target": "com.amazonaws.licensemanager#S3Location",
               "traits": {
                  "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the report was created.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
               }
```

```
}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
```

```
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

```
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "ResourceLimitExceeded",

       "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "InvalidResource.NotFound",
         "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceType": {
   "type": "enum",
    "members": {
      "EC2_INSTANCE": {
         "target": "smithy.api#Unit",
         "traits": {
            "smithy.api#enumValue": "EC2_INSTANCE"
         }
      },
      "EC2_HOST": {
         "target": "smithy.api#Unit",
         "traits": {
```

```
                "smithy.api#enumValue": "EC2_HOST"
              }
            },
            "EC2_AMI": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_AMI"
              }
            },
            "RDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "RDS"
              }
            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
          }
         },
        "com.amazonaws.licensemanager#ServerInternalException": {
          "type": "structure",
          "members": {
            "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
```

```
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

```
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
              }
            }
          },
          "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
          }
        },
        "com.amazonaws.licensemanager#TokenList": {
          "type": "list",
```

```
      "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
      }
    },
    "com.amazonaws.licensemanager#TokenString": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#TokenType": {
      "type": "enum",
      "members": {
        "REFRESH_TOKEN": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REFRESH_TOKEN"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UntagResourceResponse"
      },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
      },
      "output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
       }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
            "smithy.api#required": {}
          }
        },
```

```
            "LicenseConfigurationStatus": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
               "traits": {
                  "smithy.api#documentation": "<p>New status of the license configuration.</p>"
               }
            },
            "LicenseRules": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
               }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
               }
            },
            "Name": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New description of the license configuration.</p>"
               }
            },
            "ProductInformationList": {
               "target": "com.amazonaws.licensemanager#ProductInformationList",
               "traits": {
                  "smithy.api#documentation": "<p>New product information.</p>"
               }
            },
            "DisassociateWhenNotFound": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
```

```
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n        <li>\n        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

```
            "traits":
{
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n         <p>You can update the license specifications of AMIs, instances, and
hosts.\n         You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
              }
            },
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
              }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            }
          }
        },
        "com.amazonaws.licensemanager#ValidationException": {
```

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

      "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
}
```

1.29 alpine-baselayout 3.7.0-r0

1.29.1 Available under license :

```
# Automatically generated by apkbuild-cpan, template 1
# Contributor: Francesco Colista <francesco.colista@gmail.com>
# Maintainer: Francesco Colista <francesco.colista@gmail.com>
pkgname=perl-software-license
_pkgreal=Software-License
pkgver=0.103004
pkgrel=0
pkgdesc="packages that provide templated software licenses"
url="http://search.cpan.org/dist/Software-License/"
arch="noarch"
license="GPL PerlArtistic"
cpandepends="perl-text-template perl-data-section perl-sub-install"
cpanmakedepends="    "
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/R/RJ/RJBS/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"

prepare() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
}

build() {
 cd "$_builddir"
```

```
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test
}

package() {
 cd "$_builddir"
 make
 DESTDIR="$pkgdir" install || return 1
 find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

md5sums="0c5fd53d93818566234578b27d667b35  Software-License-0.103004.tar.gz"
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=5
pkgdesc="A library for high-performance 2D graphics"
url="http://www.levien.com/libart/"
arch="all"
license="LGPL"
depends=
makedepends=
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

_builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 cd "$_builddir"
 update_config_sub || return 1
}
build() {
 cd "$_builddir"
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  || return 1
 make || return 1
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
```

6654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"
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```
# Automatically generated by apkbuild-cpan, template 1
# Contributor: Valery Kartel <valery.kartel@gmail.com>
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pkgname=perl-bsd-resource
_pkgreal=BSD-Resource
pkgver=1.2909
pkgrel=2
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="http://search.cpan.org/dist/BSD-Resource/"
arch="all"
license="GPL PerlArtistic"
cpandepends=""
cpanmakedepends="   "
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/J/JH/JHI/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"

prepare() {
 cd "$_builddir"
```

```
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
}

build() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test || return 1
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
 find "$pkgdir"
 \( -name perllocal.pod -o -name .packlist \) -delete
}

md5sums="3c6dd2fa953088aa87e263f40818d012  BSD-Resource-1.2909.tar.gz"
sha256sums="c47d460e2bd00d8d049f6ff4a0f1f61957e289e8de45af5fc79e851e2e855e06  BSD-Resource-
1.2909.tar.gz"
sha512sums="5f489eaac5089e82081b7cf51d62638750e443751b49415407354da96b17771819b5e6e85529faa41ddd
85743363750157943c7f7700276cce2bd40a429fa430  BSD-Resource-1.2909.tar.gz"
```

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_pkgname=flake8-copyright
pkgver=0.2.0
pkgrel=1
pkgdesc="Extension for flake8 which checks for copyrights"
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="flake8"
makedepends="python3-dev"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

build() {
 cd "$builddir"
 python3 setup.py build || return 1
}

package() {
 cd "$builddir"
 python3 setup.py install --prefix=/usr --root="$pkgdir" || return 1
}

md5sums="c6348990c6d74933bf5d5f6a55a14bdf flake8-copyright-0.2.0.tar.gz"
sha256sums="aeef26eb4d5223c9cd5b101e68175fcef6d2b353bf36da688fdde62fccfe2b73 flake8-copyright-0.2.0.tar.gz"
sha512sums="bab1bfaeed3a525ac3c7da12b1f2ec338c204cc69b72d05cd39560e528faff5d586c3b1be9570f4a977a7e2417b586e543bfba12abce256b2023c8c4993eeb90

flake8-copyright-0.2.0.tar.gz"
mini_sendmail - accept email on behalf of real sendmail

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1.30 logrus 1.9.3

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1.31 perks 1.0.1

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1.32 clientmodel 0.6.2

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1.33 prometheus-client-model 0.6.2

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1.34 skalibs 2.14.4.0-r0

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pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

```
package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
```

bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6 0001-bsd-games-scores-dir.patch
"

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# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
```

```
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
```

```
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
```

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html

```
# Contributor: Dhruvin Gandhi <contact@dhru.vin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.1
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312
fda3f699cbc7c4fbd47a71e220440fb0
  license_expression-30.4.1.tar.gz
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
```

```
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif
```

```
/*
* Singly-linked List definitions.
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
```

```
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {    \
 (elm)->field.sle_next = (head)->slh_first;    \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {    \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {    \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {    \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);    \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
     curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
struct name {       \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {       \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}
```

```
/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
     (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
     (elm)->field.le_next->field.le_prev !=   \
     &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
      __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
```

```
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
    LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
     &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
     (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)
```

```
#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
     (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head) &&    \
     ((next = ((var)->field.sqe_next)), 1);   \
     (var) = (next))

/*
* Simple queue functions.
```

```
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
      (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
```

```
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
```

```
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head);     \
     (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head) &&     \
     ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head);     \
     (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head) &&     \
     ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
     (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
 if ((elm)->field.tqe_next &&     \
     (elm)->field.tqe_next->field.tqe_prev !=   \
     &(elm)->field.tqe_next)     \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
      __FILE__, __LINE__);    \
 if (*(elm)->field.tqe_prev != (elm))    \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
```

```
 if ((elm)->field.tqe_next == NULL &&    \
    (head)->tqh_last != &(elm)->field.tqe_next)   \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
     (head), (elm), __FILE__,
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);     \
 (elm)->field.tqe_prev = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
    TAILQ_END(head))      \
  (elm)->field.tqe_next->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
```

```
 (head)->tqh_last = &(elm)->field.tqe_next;  \
(listelm)->field.tqe_next = (elm);    \
(elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
     (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
      if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
    TAILQ_END(head))        \
            (elm2)->field.tqe_next->field.tqe_prev =  \
               &(elm2)->field.tqe_next;    \
      else       \
            (head)->tqh_last = &(elm2)->field.tqe_next;  \
      (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
      *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)
```

```
/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
struct name {        \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {        \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {    \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {    \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
```

```
 (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
    (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
    (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :       \
       ((struct type *)(void *)    \
  ((char *)((head)->stqh_last) - offsetof(struct type, field))))
```

```
#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {       \
```

```
 if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
  QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }       \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
  QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {      \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
  QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {       \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {       \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
```

```
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);   \
 (elm)->field.cqe_prev = (head)->cqh_last;   \
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))   \
  (head)->cqh_first = (elm);    \
 else       \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
```

```
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else       \
  (elm)->field.cqe_next->field.cqe_prev =   \
      (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else       \
  (elm)->field.cqe_prev->field.cqe_next =   \
      (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_first)     \
     : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_last)     \
     :
```

```
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
```

```
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}
```

```
package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
* Copyright 2002 Niels Provos <provos@citi.umich.edu>
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*
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 AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT,
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* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
* DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif
```

```
#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {        \
```

```
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
```

```
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}        \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{        \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *       \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{        \
   if (SPLAY_EMPTY(head)) {      \
     SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
   } else {       \
     int __comp;       \
```

```
    name##_SPLAY(head, elm);    \
    __comp = (cmp)(elm, (head)->sph_root);  \
    if(__comp < 0) {    \
     SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
     SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
     SPLAY_LEFT((head)->sph_root, field) = NULL;  \
    } else if (__comp > 0) {    \
     SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
     SPLAY_LEFT(elm, field) = (head)->sph_root;  \
     SPLAY_RIGHT((head)->sph_root, field) = NULL; \
    } else      \
     return ((head)->sph_root);    \
  }       \
  (head)->sph_root = (elm);     \
  return (NULL);      \
}       \
       \
struct type *       \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{       \
 struct type *__tmp;     \
 if (SPLAY_EMPTY(head))     \
  return (NULL);     \
 name##_SPLAY(head, elm);    \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {     \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }      \
  return (elm);     \
 }       \
 return (NULL);      \
}       \
       \
void        \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{       \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;      \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;    \
```

```
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) > 0){   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }        \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}         \
        \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/         \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{         \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
```

```
  SPLAY_LINKLEFT(head, __right, field);  \
 } else if (__comp > 0) {    \
  __tmp = SPLAY_RIGHT((head)->sph_root, field); \
  if (__tmp == NULL)    \
   break;     \
  if (__comp > 0) {    \
   SPLAY_ROTATE_LEFT(head, __tmp, field); \
   if (SPLAY_RIGHT((head)->sph_root,
field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
}       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)     \
 for ((x) = SPLAY_MIN(name, head);    \
     (x) != NULL;      \
     (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)      \
struct name {        \
 struct type *rbh_root; /* root of the tree */   \
}

#define RB_INITIALIZER(root)      \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;     \
} while (/*CONSTCOND*/ 0)
```

```
#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)       \
struct {        \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
```

```
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
```

```
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {    \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
  }       \
 }       \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
```

```
}       \
       \
attr void       \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{       \
 struct type *tmp;     \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }     \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oleft, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_RIGHT(head, tmp, oleft, field);\
     tmp = RB_RIGHT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_RIGHT(tmp, field))  \
     RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }     \
  } else {      \
   tmp = RB_LEFT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp
```

```
 = RB_LEFT(parent, field);  \
  }      \
  if ((RB_LEFT(tmp, field) == NULL ||  \
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_LEFT(tmp, field) == NULL || \
        RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
     struct type *oright;  \
     if ((oright = RB_RIGHT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oright, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_LEFT(head, tmp, oright, field);\
     tmp = RB_LEFT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_LEFT(tmp, field))  \
     RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  }       \
 }        \
 if
 (elm)       \
  RB_COLOR(elm, field) = RB_BLACK;   \
}         \
        \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{         \
 struct type *child, *parent, *old = elm;   \
 int color;       \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {        \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
```

```
 elm = left;     \
child = RB_RIGHT(elm, field);    \
parent = RB_PARENT(elm, field);    \
color = RB_COLOR(elm, field);    \
if (child)      \
 RB_PARENT(child, field) = parent;  \
if (parent) {      \
 if (RB_LEFT(parent, field) == elm)  \
  RB_LEFT(parent, field) = child;  \
 else      \
  RB_RIGHT(parent, field) = child; \
 RB_AUGMENT(parent);    \
} else       \
 RB_ROOT(head)
= child;    \
if (RB_PARENT(elm, field) == old)   \
 parent = elm;     \
(elm)->field = (old)->field;    \
if (RB_PARENT(old, field)) {    \
 if (RB_LEFT(RB_PARENT(old, field), field) == old)\
  RB_LEFT(RB_PARENT(old, field), field) = elm;\
 else      \
  RB_RIGHT(RB_PARENT(old, field), field) = elm;\
 RB_AUGMENT(RB_PARENT(old, field));  \
} else       \
 RB_ROOT(head) = elm;    \
RB_PARENT(RB_LEFT(old, field), field) = elm;  \
if (RB_RIGHT(old, field))    \
 RB_PARENT(RB_RIGHT(old, field), field) = elm; \
if (parent) {      \
 left = parent;     \
 do {      \
  RB_AUGMENT(left);   \
 } while ((left = RB_PARENT(left, field)) != NULL); \
}       \
goto color;      \
}       \
parent = RB_PARENT(elm, field);     \
color = RB_COLOR(elm, field);     \
if (child)       \
 RB_PARENT(child, field) = parent;   \
if (parent) {       \
 if (RB_LEFT(parent, field) == elm)   \
  RB_LEFT(parent, field) = child;   \
 else       \
  RB_RIGHT(parent,
field) = child;  \
 RB_AUGMENT(parent);     \
```

```
 } else       \
  RB_ROOT(head) = child;    \
color:       \
 if (color == RB_BLACK)     \
  name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);      \
}       \
       \
/* Inserts a node into the RB tree */    \
attr struct type *      \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{       \
 struct type *tmp;     \
 struct type *parent = NULL;    \
 int comp = 0;      \
 tmp = RB_ROOT(head);     \
 while (tmp) {      \
  parent = tmp;     \
  comp = (cmp)(elm, parent);   \
  if (comp < 0)     \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)    \
   tmp = RB_RIGHT(tmp, field);   \
  else      \
   return (tmp);    \
 }       \
 RB_SET(elm, parent, field);    \
 if (parent != NULL) {     \
  if (comp < 0)     \
   RB_LEFT(parent, field) = elm;   \
  else      \
   RB_RIGHT(parent, field) = elm;   \
  RB_AUGMENT(parent);    \
 } else       \
  RB_ROOT(head) = elm;    \
 name##_RB_INSERT_COLOR(head,
 elm);   \
 return (NULL);      \
}       \
       \
/* Finds the node with the same key as elm */   \
attr struct type *      \
name##_RB_FIND(struct name *head, struct type *elm)   \
{       \
 struct type *tmp = RB_ROOT(head);   \
 int comp;      \
 while (tmp) {      \
  comp = cmp(elm, tmp);    \
```

```
 if (comp < 0)     \
  tmp = RB_LEFT(tmp, field);   \
 else if (comp > 0)     \
  tmp = RB_RIGHT(tmp, field);   \
 else       \
  return (tmp);     \
 }       \
 return (NULL);       \
}        \
       \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 return (res);       \
}        \
       \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{        \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
     (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
```

```
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
attr struct type *       \
name##_RB_MINMAX(struct name *head, int val)    \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
```

```
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#endif /* _SYS_TREE_H_ */
pkgname=linux-headers
pkgver=6.14.2 # Follow the latest Linux stable
_kernver=${pkgver%.*}
pkgrel=0
pkgdesc="Linux system headers"
url="https://kernel.org/"
arch="all" # Headers are architecture specific
```

```
license="GPL-2.0-only"
makedepends="perl"
options="!check !dbg !strip !tracedeps !archcheck"
source="https://kernel.org/pub/linux/kernel/v6.x/linux-$_kernver.tar.xz
 revert-broken-uapi.patch
 0003-remove-inclusion-of-sysinfo.h-in-kernel.h.patch
```

1.35 ncurses 6.5_p20250503-r0

1.35.1 Available under license :

```
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
```

```
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x
```

```
#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}
```

```
sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
* Copyright 2002 Niels Provos <provos@citi.umich.edu>
* All rights reserved.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
```

```
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* DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
```

```
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {       \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
```

```
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
```

```
{       \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}       \
       \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{       \
 name##_SPLAY_MINMAX(head, val);     \
      return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *       \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{       \
  if (SPLAY_EMPTY(head)) {      \
    SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
  } else {       \
    int __comp;       \
    name##_SPLAY(head, elm);     \
    __comp = (cmp)(elm, (head)->sph_root);   \
    if(__comp < 0) {      \
     SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
     SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
     SPLAY_LEFT((head)->sph_root, field) = NULL;  \
    } else if (__comp > 0) {     \
     SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
     SPLAY_LEFT(elm, field) = (head)->sph_root;  \
     SPLAY_RIGHT((head)->sph_root, field) = NULL; \
    } else       \
     return ((head)->sph_root);    \
  }       \
  (head)->sph_root = (elm);      \
  return (NULL);       \
}       \
```

```
        \
struct type *       \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{       \
 struct type *__tmp;     \
 if (SPLAY_EMPTY(head))     \
  return (NULL);     \
 name##_SPLAY(head, elm);    \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {     \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }      \
  return (elm);     \
 }       \
 return (NULL);      \
}       \
        \
void        \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{       \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;      \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;    \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {    \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;    \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }     \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;    \
   if ((cmp)(elm, __tmp) > 0){   \
```

```
   SPLAY_ROTATE_LEFT(head, __tmp, field); \
   if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
    break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }        \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}         \
        \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{         \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp > 0) {    \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }        \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}
```

```
#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)    \
 for ((x) = SPLAY_MIN(name, head);   \
     (x) != NULL;     \
     (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)     \
struct name {       \
 struct type *rbh_root; /* root of the tree */   \
}

#define RB_INITIALIZER(root)     \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;    \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)      \
struct {       \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)
```

```
#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
```

```
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{        \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
```

```
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
  }       \
 }        \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}         \
        \
attr void        \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{         \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
```

```
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp,
field), field) == RB_BLACK)) {\
   RB_COLOR(tmp, field) = RB_RED;  \
   elm = parent;    \
   parent = RB_PARENT(elm, field);  \
   } else {     \
   if (RB_RIGHT(tmp, field) == NULL || \
       RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
    struct type *oleft;  \
    if ((oleft = RB_LEFT(tmp, field)) \
        != NULL)   \
     RB_COLOR(oleft, field) = RB_BLACK;\
    RB_COLOR(tmp, field) = RB_RED; \
    RB_ROTATE_RIGHT(head, tmp, oleft, field);\
    tmp = RB_RIGHT(parent, field); \
    }     \
   RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
   RB_COLOR(parent, field) = RB_BLACK; \
   if (RB_RIGHT(tmp, field))  \
    RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
   RB_ROTATE_LEFT(head, parent, tmp, field);\
   elm = RB_ROOT(head);   \
   break;     \
   }      \
  } else {      \
  tmp = RB_LEFT(parent, field);   \
  if (RB_COLOR(tmp, field) == RB_RED) {  \
   RB_SET_BLACKRED(tmp, parent, field); \
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   tmp
= RB_LEFT(parent, field);  \
  }      \
  if ((RB_LEFT(tmp, field) == NULL ||  \
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
   RB_COLOR(tmp, field) = RB_RED;  \
   elm = parent;    \
   parent = RB_PARENT(elm, field);  \
   } else {     \
   if (RB_LEFT(tmp, field) == NULL || \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
    struct type *oright;  \
    if ((oright = RB_RIGHT(tmp, field)) \
        != NULL)   \
     RB_COLOR(oright, field) = RB_BLACK;\
    RB_COLOR(tmp, field) = RB_RED; \
```

```
    RB_ROTATE_LEFT(head, tmp, oright, field);\
    tmp = RB_LEFT(parent, field); \
   }     \
   RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
   RB_COLOR(parent, field) = RB_BLACK; \
   if (RB_LEFT(tmp, field))  \
    RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   elm = RB_ROOT(head);   \
   break;     \
  }      \
 }       \
}        \
if
(elm)       \
 RB_COLOR(elm, field) = RB_BLACK;   \
}        \
       \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{        \
 struct type *child, *parent, *old = elm;   \
 int color;       \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {       \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
  color = RB_COLOR(elm, field);    \
  if (child)      \
   RB_PARENT(child, field) = parent;  \
  if (parent) {      \
   if (RB_LEFT(parent, field) == elm)  \
    RB_LEFT(parent, field) = child;  \
   else      \
    RB_RIGHT(parent, field) = child; \
   RB_AUGMENT(parent);    \
  } else       \
   RB_ROOT(head)
 = child;    \
  if (RB_PARENT(elm, field) == old)   \
   parent = elm;     \
```

```
 (elm)->field = (old)->field;    \
 if (RB_PARENT(old, field)) {    \
  if (RB_LEFT(RB_PARENT(old, field), field) == old)\
   RB_LEFT(RB_PARENT(old, field), field) = elm;\
  else      \
   RB_RIGHT(RB_PARENT(old, field), field) = elm;\
  RB_AUGMENT(RB_PARENT(old, field));  \
 } else       \
  RB_ROOT(head) = elm;    \
 RB_PARENT(RB_LEFT(old, field), field) = elm;  \
 if (RB_RIGHT(old, field))    \
  RB_PARENT(RB_RIGHT(old, field), field) = elm; \
 if (parent) {      \
  left = parent;     \
  do {      \
   RB_AUGMENT(left);   \
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }       \
 goto color;      \
}        \
parent = RB_PARENT(elm, field);     \
color = RB_COLOR(elm, field);     \
if (child)       \
 RB_PARENT(child, field) = parent;   \
if (parent) {       \
 if (RB_LEFT(parent, field) == elm)   \
  RB_LEFT(parent, field) = child;   \
 else       \
  RB_RIGHT(parent,
field) = child;  \
 RB_AUGMENT(parent);     \
} else        \
 RB_ROOT(head) = child;     \
color:         \
if (color == RB_BLACK)      \
 name##_RB_REMOVE_COLOR(head, parent, child);  \
return (old);       \
}        \
        \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
```

```
 parent = tmp;      \
 comp = (cmp)(elm, parent);    \
 if (comp < 0)      \
  tmp = RB_LEFT(tmp, field);   \
 else if (comp > 0)     \
  tmp = RB_RIGHT(tmp, field);   \
 else       \
  return (tmp);     \
}       \
RB_SET(elm, parent, field);     \
if (parent != NULL) {      \
 if (comp < 0)      \
  RB_LEFT(parent, field) = elm;   \
 else       \
  RB_RIGHT(parent, field) = elm;   \
 RB_AUGMENT(parent);     \
} else       \
 RB_ROOT(head) = elm;     \
name##_RB_INSERT_COLOR(head,
elm);    \
return (NULL);       \
}        \
        \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 return (NULL);       \
}        \
        \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
```

```
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 return (res);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{        \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
```

```
    (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
  elm = RB_PARENT(elm, field);  \
 else {      \
  while (RB_PARENT(elm, field) &&  \
     (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
   elm = RB_PARENT(elm, field);  \
  elm = RB_PARENT(elm, field);  \
 }      \
}       \
return (elm);      \
}        \
       \
attr struct type *      \
name##_RB_MINMAX(struct name *head, int val)   \
{        \
 struct type *tmp = RB_ROOT(head);   \
 struct type *parent = NULL;    \
 while (tmp) {      \
  parent = tmp;     \
  if (val < 0)     \
   tmp = RB_LEFT(tmp, field);  \
  else      \
   tmp = RB_RIGHT(tmp, field);  \
 }       \
 return (parent);     \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)    \
 for ((x) = RB_MIN(name, head);    \
     (x) != NULL;     \
     (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)    \
 for ((x) = (y);      \
    ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
```

```
    (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#endif /* _SYS_TREE_H_ */
```


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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

1.36 readline 8.2.13-r1

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```
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 Ty Coon, President of Vice
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```
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
```

```
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
```

```
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6  0001-bsd-games-scores-dir.patch
"
```

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mini_sendmail - accept email on behalf of real sendmail

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
```

```
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
```

```
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html
Contributor: Dhruvin Gandhi <contact@dhru.vin>
Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.1
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312
fda3f699cbc7c4fbd47a71e220440fb0

```
  license_expression-30.4.1.tar.gz
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
```

```
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
```

```
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))
```

```
/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {   \
 (elm)->field.sle_next = (head)->slh_first;   \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {   \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {    \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
     curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
struct name {       \
 struct type *lh_first; /* first element */   \
}
```

```
#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {        \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }        \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
     (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
```

```
 if ((elm)->field.le_next &&     \
    (elm)->field.le_next->field.le_prev !=   \
    &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
     __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
     __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
    LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
     &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)
```

```
#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
      (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
```

```
    (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
    (var) != SIMPLEQ_END(head) &&    \
    ((next = ((var)->field.sqe_next)), 1);   \
    (var) = (next))

/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
```

```
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
       (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
```

```
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head);     \
     (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head) &&     \
     ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head);     \
     (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head) &&     \
     ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
     (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
```

```
 if ((elm)->field.tqe_next &&     \
     (elm)->field.tqe_next->field.tqe_prev !=   \
     &(elm)->field.tqe_next)     \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
      __FILE__, __LINE__);    \
 if (*(elm)->field.tqe_prev != (elm))    \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
 if ((elm)->field.tqe_next == NULL &&    \
     (head)->tqh_last != &(elm)->field.tqe_next)   \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
      (head), (elm), __FILE__,
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =   \
      &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);     \
 (elm)->field.tqe_prev = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
```

```
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
    TAILQ_END(head))      \
  (elm)->field.tqe_next->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (listelm)->field.tqe_next = (elm);    \
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
     (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
      if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
    TAILQ_END(head))        \
            (elm2)->field.tqe_next->field.tqe_prev =  \
               &(elm2)->field.tqe_next;    \
      else       \
            (head)->tqh_last = &(elm2)->field.tqe_next;  \
      (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
      *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
} while (/*CONSTCOND*/0)
```

```
#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
struct name {        \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {        \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)
```

```
#define STAILQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
    (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
    (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
```

```
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :      \
        ((struct type *)(void *)    \
  ((char *)((head)->stqh_last) - offsetof(struct type, field))))


#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
```

```
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }        \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
```

```
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);   \
 (elm)->field.cqe_prev = (head)->cqh_last;   \
```

```
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))   \
  (head)->cqh_first = (elm);    \
 else       \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else       \
  (elm)->field.cqe_next->field.cqe_prev =   \
      (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else       \
  (elm)->field.cqe_prev->field.cqe_next =   \
      (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))
```

```
#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
    ? ((head)->cqh_first)     \
    : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
    ? ((head)->cqh_last)     \
    :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
```

```
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}
```

```
build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
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* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_
```

```
#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)      \
```

```
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {        \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
```

```
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}        \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{        \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
```

```
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *       \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{       \
  if (SPLAY_EMPTY(head)) {      \
    SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
  } else {       \
    int __comp;       \
    name##_SPLAY(head, elm);     \
    __comp = (cmp)(elm, (head)->sph_root);   \
    if(__comp < 0) {      \
     SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
     SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
     SPLAY_LEFT((head)->sph_root, field) = NULL;  \
    } else if (__comp > 0) {     \
     SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
     SPLAY_LEFT(elm, field) = (head)->sph_root;  \
     SPLAY_RIGHT((head)->sph_root, field) = NULL; \
    } else       \
     return ((head)->sph_root);    \
  }       \
  (head)->sph_root = (elm);      \
  return (NULL);       \
}       \
       \
struct type *       \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{       \
 struct type *__tmp;      \
 if (SPLAY_EMPTY(head))      \
  return (NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {      \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }       \
  return (elm);      \
 }       \
 return (NULL);       \
}       \
       \
void        \
```

```
name##_SPLAY(struct
 name *head, struct type *elm)   \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;       \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) > 0){   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }        \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}        \
        \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
```

```
  __tmp = SPLAY_LEFT((head)->sph_root, field); \
  if (__tmp == NULL)    \
   break;     \
  if (__comp < 0){    \
   SPLAY_ROTATE_RIGHT(head, __tmp, field); \
   if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKLEFT(head, __right, field);  \
 } else if (__comp > 0) {    \
  __tmp = SPLAY_RIGHT((head)->sph_root, field); \
  if (__tmp == NULL)    \
   break;     \
  if (__comp > 0) {    \
   SPLAY_ROTATE_LEFT(head, __tmp, field); \
   if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
}       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)     \
 for ((x) = SPLAY_MIN(name, head);    \
      (x) != NULL;      \
      (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)      \
struct name {        \
 struct type *rbh_root; /* root of the tree */   \
}
```

```
#define RB_INITIALIZER(root)	\
 {
 NULL }

#define RB_INIT(root) do {	\
 (root)->rbh_root = NULL;	\
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)	\
struct {	\
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {	\
 RB_PARENT(elm, field) = parent;	\
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;	\
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {	\
 RB_COLOR(black, field) = RB_BLACK;	\
 RB_COLOR(red, field)
 = RB_RED;	\
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {	\
 (tmp) = RB_RIGHT(elm, field);	\
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }	\
 RB_AUGMENT(elm);	\
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
```

```
 if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
  RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
 else      \
  RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
 (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
```

```
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
```

```
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
  }       \
 }        \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}         \
        \
attr void        \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{         \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oleft, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_RIGHT(head, tmp, oleft, field);\
     tmp = RB_RIGHT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_RIGHT(tmp, field))  \
     RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
```

```
    break;     \
   }      \
  } else {      \
   tmp = RB_LEFT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp
 = RB_LEFT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_LEFT(tmp, field) == NULL ||\
        RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
     struct type *oright;  \
     if ((oright = RB_RIGHT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oright, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_LEFT(head, tmp, oright, field);\
     tmp = RB_LEFT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_LEFT(tmp, field))  \
     RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  }       \
 }       \
 if
 (elm)      \
  RB_COLOR(elm, field) = RB_BLACK;   \
}        \
        \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{        \
 struct type *child, *parent, *old = elm;   \
 int color;       \
```

```
if (RB_LEFT(elm, field) == NULL)    \
 child = RB_RIGHT(elm, field);    \
else if (RB_RIGHT(elm, field) == NULL)    \
 child = RB_LEFT(elm, field);    \
else {       \
 struct type *left;     \
 elm = RB_RIGHT(elm, field);    \
 while ((left = RB_LEFT(elm, field)) != NULL)  \
  elm = left;     \
 child = RB_RIGHT(elm, field);    \
 parent = RB_PARENT(elm, field);    \
 color = RB_COLOR(elm, field);    \
 if (child)      \
  RB_PARENT(child, field) = parent;  \
 if (parent) {      \
  if (RB_LEFT(parent, field) == elm)  \
   RB_LEFT(parent, field) = child;  \
  else      \
   RB_RIGHT(parent, field) = child; \
  RB_AUGMENT(parent);    \
 } else       \
  RB_ROOT(head)
= child;    \
 if (RB_PARENT(elm, field) == old)   \
  parent = elm;     \
 (elm)->field = (old)->field;    \
 if (RB_PARENT(old, field)) {    \
  if (RB_LEFT(RB_PARENT(old, field), field) == old)\
   RB_LEFT(RB_PARENT(old, field), field) = elm;\
  else      \
   RB_RIGHT(RB_PARENT(old, field), field) = elm;\
  RB_AUGMENT(RB_PARENT(old, field));  \
 } else       \
  RB_ROOT(head) = elm;    \
 RB_PARENT(RB_LEFT(old, field), field) = elm;  \
 if (RB_RIGHT(old, field))    \
  RB_PARENT(RB_RIGHT(old, field), field) = elm; \
 if (parent) {      \
  left = parent;     \
  do {      \
   RB_AUGMENT(left);   \
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }       \
 goto color;      \
}       \
parent = RB_PARENT(elm, field);     \
color = RB_COLOR(elm, field);     \
if (child)       \
```

```
 RB_PARENT(child, field) = parent;   \
 if (parent) {       \
  if (RB_LEFT(parent, field) == elm)   \
   RB_LEFT(parent, field) = child;   \
  else       \
   RB_RIGHT(parent,
 field) = child;  \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = child;     \
color:        \
 if (color == RB_BLACK)      \
  name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);       \
}        \
        \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 RB_SET(elm, parent, field);     \
 if (parent != NULL) {      \
  if (comp < 0)      \
   RB_LEFT(parent, field) = elm;   \
  else       \
   RB_RIGHT(parent, field) = elm;   \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = elm;     \
 name##_RB_INSERT_COLOR(head,
 elm);    \
 return (NULL);       \
}        \
        \
```

```
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 return (NULL);       \
}        \
        \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 return (res);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{        \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
```

```
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
attr struct type *       \
name##_RB_MINMAX(struct name *head, int val)    \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
```

```
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))
```

#endif /* _SYS_TREE_H_ */
pkgname=linux-headers
pkgver=6.14.2 # Follow the latest Linux stable
_kernver=${pkgver%.*}
pkgrel=0
pkgdesc="Linux system headers"
url="https://kernel.org/"
arch="all" # Headers are architecture specific
license="GPL-2.0-only"
makedepends="perl"
options="!check !dbg !strip !tracedeps !archcheck"
source="https://kernel.org/pub/linux/kernel/v6.x/linux-$_kernver.tar.xz
 revert-broken-uapi.patch
 0003-remove-inclusion-of-sysinfo.h-in-kernel.h.patch

1.38 go-grpc-middleware 2.3.2

1.38.1 Available under license :

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cloud.google.com/go v0.26.0/go.mod h1:aQUYkXzVsufM+DwF1aE+0xfcU+56JwCaLick0ClmMTw=
github.com/BurntSushi/toml v0.3.1/go.mod h1:xHWCNGjB5oqiDr8zfno3MHue2Ht5sIBksp03qcyfWMU=
github.com/alecthomas/template v0.0.0-20190718012654-fb15b899a751
h1:JYp7IbQjafoB+tBA3gMyHYHrpOtNuDiK/uB5uXxq5wM=
github.com/alecthomas/template v0.0.0-20190718012654-fb15b899a751/go.mod
h1:LOuyumcjzFXgccqObfd/Ljyb9UuFJ6TxHnclSeseNhc=
github.com/alecthomas/units v0.0.0-20201120081800-1786d5ef83d4
h1:EBTWhcAX7rNQ80RLwLCpHZBBrJuzallFHnF+yMXo928=
github.com/alecthomas/units v0.0.0-20201120081800-1786d5ef83d4/go.mod
h1:OMCwj8VM1Kc9e19TLln2VL61YJF0x1XFtfdL4JdbSyE=
github.com/census-instrumentation/opencensus-proto v0.2.1/go.mod
h1:f6KPmirojxKA12rnyqOA5BBL4O983OfeGPqjHWSTneU=
github.com/chzyer/logex v1.1.10/go.mod h1:+Ywpsq7O8HXn0nuIou7OrIPyXbp3wmkHB+jjWRnGsAI=
github.com/chzyer/readline v0.0.0-20180603132655-2972be24d48e/go.mod
h1:nSuG5e5PlCu98SY8svDHJxuZscDgtXS6KTTbou5AhLI=
github.com/chzyer/test v0.0.0-20180213035817-a1ea475d72b1/go.mod
 h1:Q3SI9o4m/ZMnBNeIyt5eFwwo7qiLfzFZmjNmxjkiQlU=
github.com/client9/misspell v0.3.4/go.mod h1:qj6jICC3Q7zFZvVWo7KLAzC3yx5G7kyvSDkc90ppPyw=
github.com/davecgh/go-spew v1.1.0/go.mod h1:J7Y8YcW2NihsgmVo/mv3lAwl/skON4iLHjSsI+c5H38=
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module _ // Auto generated by https://github.com/bwplotka/bingo. DO NOT EDIT

go 1.16

require github.com/efficientgo/tools/copyright v0.0.0-20210326193628-425a09c04e05
```

1.39 apk-tools 2.14.9-r2

1.39.1 Available under license :

```
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
```

```
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6  0001-bsd-games-scores-dir.patch
"
```

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
```

}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"
mini_sendmail - accept email on behalf of real sendmail

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Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

```
_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers
```

```
package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html

```
# Contributor: Dhruvin Gandhi <contact@dhru.vin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.1
```

```
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312
fda3f699cbc7c4fbd47a71e220440fb0
  license_expression-30.4.1.tar.gz
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
```

```
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
*/
```

```
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {   \
 (elm)->field.sle_next = (head)->slh_first;   \
```

```
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {   \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {    \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
      curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
struct name {       \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {       \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
```

```
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
    (var) != LIST_END(head);     \
    (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
    (var) != LIST_END(head) &&     \
    ((tvar) = LIST_NEXT((var), field), 1);   \
    (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
    (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
     __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
    (elm)->field.le_next->field.le_prev !=   \
    &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
     __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
     __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
```

```
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
     LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
      &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
      (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
```

```
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
     (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head) &&    \
     ((next = ((var)->field.sqe_next)), 1);   \
     (var) = (next))

/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
```

```
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
      (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
```

```
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
```

```
 for ((var) = ((head)->tqh_first);    \
    (var) != TAILQ_END(head);     \
    (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
    (var) != TAILQ_END(head) &&     \
    ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
    (var) != TAILQ_END(head);     \
    (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
    (var) != TAILQ_END(head) &&     \
    ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
    (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
 if ((elm)->field.tqe_next &&     \
    (elm)->field.tqe_next->field.tqe_prev !=   \
    &(elm)->field.tqe_next)     \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
      __FILE__, __LINE__);    \
 if (*(elm)->field.tqe_prev != (elm))    \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
 if ((elm)->field.tqe_next == NULL &&    \
    (head)->tqh_last != &(elm)->field.tqe_next)   \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
      (head), (elm), __FILE__,
```

```
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);     \
 (elm)->field.tqe_prev = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
    TAILQ_END(head))      \
  (elm)->field.tqe_next->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (listelm)->field.tqe_next = (elm);    \
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)
```

```
#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
     (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
      if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
    TAILQ_END(head))        \
            (elm2)->field.tqe_next->field.tqe_prev =  \
               &(elm2)->field.tqe_next;    \
      else       \
            (head)->tqh_last = &(elm2)->field.tqe_next;  \
      (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
      *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
```

```
struct name {       \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {        \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)
```

```
#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
    (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
    (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :       \
       ((struct type *)(void *)    \
  ((char *)((head)->stqh_last) - offsetof(struct type, field))))



#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
```

```
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {      \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }       \
```

```
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
```

```
 (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);   \
 (elm)->field.cqe_prev = (head)->cqh_last;   \
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))   \
  (head)->cqh_first = (elm);    \
 else       \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else       \
```

```
 (elm)->field.cqe_next->field.cqe_prev =   \
     (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else       \
  (elm)->field.cqe_prev->field.cqe_next =   \
     (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_first)     \
     : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_last)     \
     :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
```

```
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver
```

```
replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
```

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Version 2, June 1991

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pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

```
sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
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*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
```

```
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {        \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}
```

```
#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
```

```
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}        \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{        \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *        \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{        \
   if (SPLAY_EMPTY(head)) {      \
     SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
   } else {       \
     int __comp;       \
     name##_SPLAY(head, elm);     \
     __comp = (cmp)(elm, (head)->sph_root);   \
     if(__comp < 0) {      \
```

```
      SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
      SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
      SPLAY_LEFT((head)->sph_root, field) = NULL;  \
     } else if (__comp > 0) {     \
      SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
      SPLAY_LEFT(elm, field) = (head)->sph_root;  \
      SPLAY_RIGHT((head)->sph_root, field) = NULL; \
     } else       \
      return ((head)->sph_root);    \
   }         \
   (head)->sph_root = (elm);      \
   return (NULL);       \
}         \
         \
struct type *        \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{         \
 struct type *__tmp;      \
 if (SPLAY_EMPTY(head))      \
  return (NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {      \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }       \
 return (elm);      \
 }        \
 return (NULL);       \
}         \
         \
void         \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{         \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;       \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
```

```
  __tmp = SPLAY_LEFT((head)->sph_root, field); \
  if (__tmp == NULL)    \
   break;     \
  if ((cmp)(elm, __tmp) < 0){   \
   SPLAY_ROTATE_RIGHT(head, __tmp, field); \
   if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKLEFT(head, __right, field);  \
 } else if (__comp > 0) {    \
  __tmp = SPLAY_RIGHT((head)->sph_root, field); \
  if (__tmp == NULL)    \
   break;     \
  if ((cmp)(elm, __tmp) > 0){   \
   SPLAY_ROTATE_LEFT(head, __tmp, field); \
   if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
}       \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}        \
       \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
```

```
  if (__tmp == NULL)    \
   break;     \
  if (__comp > 0) {    \
   SPLAY_ROTATE_LEFT(head, __tmp, field); \
   if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
}       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)     \
 for ((x) = SPLAY_MIN(name, head);    \
     (x) != NULL;      \
     (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)      \
struct name {        \
 struct type *rbh_root; /* root of the tree */   \
}

#define RB_INITIALIZER(root)      \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)       \
```

```
struct {        \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }        \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
```

```
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
```

```
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
  }       \
 }       \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}       \
        \
attr void       \
```

```
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{       \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oleft, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_RIGHT(head, tmp, oleft, field);\
     tmp = RB_RIGHT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_RIGHT(tmp, field))  \
     RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  } else {      \
   tmp = RB_LEFT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp
 = RB_LEFT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
```

```
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_LEFT(tmp, field) == NULL || \
        RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
     struct type *oright;  \
     if ((oright = RB_RIGHT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oright, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_LEFT(head, tmp, oright, field);\
     tmp = RB_LEFT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_LEFT(tmp, field))  \
     RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  }       \
 }        \
 if
 (elm)       \
  RB_COLOR(elm, field) = RB_BLACK;   \
}         \
         \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{         \
 struct type *child, *parent, *old = elm;   \
 int color;       \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {        \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
```

```
 color = RB_COLOR(elm, field);    \
 if (child)     \
  RB_PARENT(child, field) = parent;  \
 if (parent) {     \
  if (RB_LEFT(parent, field) == elm)  \
   RB_LEFT(parent, field) = child;  \
  else     \
   RB_RIGHT(parent, field) = child; \
  RB_AUGMENT(parent);    \
 } else      \
  RB_ROOT(head)
= child;    \
 if (RB_PARENT(elm, field) == old)   \
  parent = elm;     \
 (elm)->field = (old)->field;    \
 if (RB_PARENT(old, field)) {    \
  if (RB_LEFT(RB_PARENT(old, field), field) == old)\
   RB_LEFT(RB_PARENT(old, field), field) = elm;\
  else     \
   RB_RIGHT(RB_PARENT(old, field), field) = elm;\
  RB_AUGMENT(RB_PARENT(old, field));  \
 } else      \
  RB_ROOT(head) = elm;    \
 RB_PARENT(RB_LEFT(old, field), field) = elm;  \
 if (RB_RIGHT(old, field))    \
  RB_PARENT(RB_RIGHT(old, field), field) = elm; \
 if (parent) {     \
  left = parent;     \
  do {     \
   RB_AUGMENT(left);   \
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }      \
 goto color;     \
}       \
parent = RB_PARENT(elm, field);     \
color = RB_COLOR(elm, field);     \
if (child)      \
 RB_PARENT(child, field) = parent;   \
if (parent) {      \
 if (RB_LEFT(parent, field) == elm)   \
  RB_LEFT(parent, field) = child;   \
 else      \
  RB_RIGHT(parent,
field) = child;  \
 RB_AUGMENT(parent);     \
} else       \
 RB_ROOT(head) = child;     \
color:        \
```

```
 if (color == RB_BLACK)      \
  name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);       \
}         \
        \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{         \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 RB_SET(elm, parent, field);     \
 if (parent != NULL) {      \
  if (comp < 0)      \
   RB_LEFT(parent, field) = elm;   \
  else       \
   RB_RIGHT(parent, field) = elm;   \
  RB_AUGMENT(parent);     \
 } else        \
  RB_ROOT(head) = elm;     \
 name##_RB_INSERT_COLOR(head,
 elm);    \
 return (NULL);       \
}         \
        \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{         \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
```

```
  tmp = RB_RIGHT(tmp, field);   \
 else      \
  return (tmp);     \
 }       \
 return (NULL);      \
}        \
       \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *      \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else      \
   return (tmp);     \
 }       \
 return (res);       \
}        \
       \
/* ARGSUSED */       \
attr struct type *      \
name##_RB_NEXT(struct type *elm)     \
{        \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
```

```
 return (elm);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
attr struct type *       \
name##_RB_MINMAX(struct name *head, int val)    \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
```

```
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#endif /* _SYS_TREE_H_ */
```

1.40 musl-utils 1.2.5-r10

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1.43 alpine-baselayout-data 3.7.0-r0

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# Automatically generated by apkbuild-cpan, template 1
# Contributor: Francesco Colista <francesco.colista@gmail.com>
# Maintainer: Francesco Colista <francesco.colista@gmail.com>
pkgname=perl-software-license
_pkgreal=Software-License
pkgver=0.103004
pkgrel=0
pkgdesc="packages that provide templated software licenses"
url="http://search.cpan.org/dist/Software-License/"
arch="noarch"
license="GPL PerlArtistic"
cpandepends="perl-text-template perl-data-section perl-sub-install"
cpanmakedepends="    "
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/R/RJ/RJBS/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"
```

```
prepare() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
}

build() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test
}

package() {
 cd "$_builddir"
 make
 DESTDIR="$pkgdir" install || return 1
 find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

md5sums="0c5fd53d93818566234578b27d667b35  Software-License-0.103004.tar.gz"
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=5
pkgdesc="A library for high-performance 2D graphics"
url="http://www.levien.com/libart/"
arch="all"
license="LGPL"
depends=
makedepends=
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

_builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 cd "$_builddir"
 update_config_sub || return 1
}
build() {
 cd "$_builddir"
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  || return 1
 make || return 1
```

```
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

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# Contributor: Valery Kartel <valery.kartel@gmail.com>
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pkgname=perl-bsd-resource
_pkgreal=BSD-Resource
pkgver=1.2909
pkgrel=2
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="http://search.cpan.org/dist/BSD-Resource/"
arch="all"
license="GPL PerlArtistic"
cpandepends=""
cpanmakedepends="   "
```

```
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/J/JH/JHI/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"

prepare() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
}

build() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test || return 1
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
 find "$pkgdir"
 \( -name perllocal.pod -o -name .packlist \) -delete
}

md5sums="3c6dd2fa953088aa87e263f40818d012  BSD-Resource-1.2909.tar.gz"
sha256sums="c47d460e2bd00d8d049f6ff4a0f1f61957e289e8de45af5fc79e851e2e855e06  BSD-Resource-
1.2909.tar.gz"
sha512sums="5f489eaac5089e82081b7cf51d62638750e443751b49415407354da96b17771819b5e6e85529faa41ddd
85743363750157943c7f7700276cce2bd40a429fa430  BSD-Resource-1.2909.tar.gz"
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pkgname=py-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.0
pkgrel=1
pkgdesc="Extension for flake8 which checks for copyrights"
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="flake8"
makedepends="python3-dev"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

build() {
 cd "$builddir"
 python3 setup.py build || return 1
}

package() {
 cd "$builddir"

```
 python3 setup.py install --prefix=/usr --root="$pkgdir" || return 1
}

md5sums="c6348990c6d74933bf5d5f6a55a14bdf  flake8-copyright-0.2.0.tar.gz"
sha256sums="aeef26eb4d5223c9cd5b101e68175fcef6d2b353bf36da688fdde62fccfe2b73  flake8-copyright-
0.2.0.tar.gz"
sha512sums="bab1bfaeed3a525ac3c7da12b1f2ec338c204cc69b72d05cd39560e528faff5d586c3b1be9570f4a977a7e
2417b586e543bfba12abce256b2023c8c4993eeb90
  flake8-copyright-0.2.0.tar.gz"
```

mini_sendmail - accept email on behalf of real sendmail

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1.44 pam 1.7.0-r4

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# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}
```

```
package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
```

577b7e278029ca5ed50f7aab22319f6 0001-bsd-games-scores-dir.patch
"
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```
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# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
```

```
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
```

```
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html

```
# Contributor: Dhruvin Gandhi <contact@dhru.vin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
```

```
_pkgname=license_expression
pkgver=30.4.1
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312
fda3f699cbc7c4fbd47a71e220440fb0
  license_expression-30.4.1.tar.gz
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

/*
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* SUCH DAMAGE.
*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
```

```
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
```

```
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {   \
```

```
 (elm)->field.sle_next = (head)->slh_first;   \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {   \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {    \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
     curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
struct name {       \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {       \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
```

```
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
     (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
     (elm)->field.le_next->field.le_prev !=   \
     &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
      __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
```

```
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
     LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
      &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
      (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
```

```
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
     (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head) &&    \
     ((next = ((var)->field.sqe_next)), 1);   \
     (var) = (next))

/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
```

```
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
      (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
```

```
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
```

```
 for ((var) = ((head)->tqh_first);    \
    (var) != TAILQ_END(head);     \
    (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
    (var) != TAILQ_END(head) &&     \
    ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
    (var) != TAILQ_END(head);     \
    (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
    (var) != TAILQ_END(head) &&     \
    ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
    (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
 if ((elm)->field.tqe_next &&     \
    (elm)->field.tqe_next->field.tqe_prev !=   \
    &(elm)->field.tqe_next)     \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
      __FILE__, __LINE__);    \
 if (*(elm)->field.tqe_prev != (elm))    \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
 if ((elm)->field.tqe_next == NULL &&    \
    (head)->tqh_last != &(elm)->field.tqe_next)   \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
      (head), (elm), __FILE__,
```

```
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);     \
 (elm)->field.tqe_prev = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
    TAILQ_END(head))      \
  (elm)->field.tqe_next->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (listelm)->field.tqe_next = (elm);    \
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)
```

```
#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
     (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
      if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
    TAILQ_END(head))        \
            (elm2)->field.tqe_next->field.tqe_prev =  \
               &(elm2)->field.tqe_next;    \
      else       \
            (head)->tqh_last = &(elm2)->field.tqe_next;  \
      (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
      *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
```

```
struct name {        \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {        \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)
```

```
#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
     (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
     (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type *)(void *)    \
  ((char *)((head)->stqh_last) - offsetof(struct type, field))))



#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
```

```
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {      \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }       \
```

```
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
```

```
 (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);   \
 (elm)->field.cqe_prev = (head)->cqh_last;   \
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))   \
  (head)->cqh_first = (elm);    \
 else       \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else       \
```

```
 (elm)->field.cqe_next->field.cqe_prev =   \
     (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else       \
  (elm)->field.cqe_prev->field.cqe_next =   \
     (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_first)     \
     : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_last)     \
     :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
```

```
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
```

```
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}
```

```
sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
* Copyright 2002 Niels Provos <provos@citi.umich.edu>
* All rights reserved.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:
* 1. Redistributions of source code must retain the above copyright
*    notice, this list of conditions and the following disclaimer.
* 2. Redistributions in binary form must reproduce the above copyright
*    notice, this list of conditions and the following disclaimer in the
*    documentation and/or other materials provided with the distribution.
*
* THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR
* IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
* OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.
* IN NO EVENT SHALL THE
 AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT,
* INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
* DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
```

```
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {        \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}
```

```
#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
```

```
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}        \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{        \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *        \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{        \
   if (SPLAY_EMPTY(head)) {      \
     SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
   } else {        \
     int __comp;       \
     name##_SPLAY(head, elm);     \
     __comp = (cmp)(elm, (head)->sph_root);   \
     if(__comp < 0) {      \
      SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
```

```
      SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
      SPLAY_LEFT((head)->sph_root, field) = NULL;  \
     } else if (__comp > 0) {     \
      SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
      SPLAY_LEFT(elm, field) = (head)->sph_root;  \
      SPLAY_RIGHT((head)->sph_root, field) = NULL; \
     } else       \
      return ((head)->sph_root);    \
   }        \
   (head)->sph_root = (elm);      \
   return (NULL);       \
}        \
        \
struct type *        \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{        \
 struct type *__tmp;      \
 if (SPLAY_EMPTY(head))      \
  return (NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {      \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }       \
  return (elm);      \
 }        \
 return (NULL);       \
}        \
        \
void         \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;       \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
```

```
  if (__tmp == NULL)    \
   break;     \
  if ((cmp)(elm, __tmp) < 0){   \
   SPLAY_ROTATE_RIGHT(head, __tmp, field); \
   if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKLEFT(head, __right, field);  \
 } else if (__comp > 0) {    \
  __tmp = SPLAY_RIGHT((head)->sph_root, field); \
  if (__tmp == NULL)    \
   break;     \
  if ((cmp)(elm, __tmp) > 0){   \
   SPLAY_ROTATE_LEFT(head, __tmp, field); \
   if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
}       \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}        \
       \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
```

```
    break;     \
  if (__comp > 0) {    \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
     break;    \
  }      \
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
 }       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)     \
 for ((x) = SPLAY_MIN(name, head);    \
     (x) != NULL;      \
     (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)      \
struct name {        \
 struct type *rbh_root; /* root of the tree */   \
}

#define RB_INITIALIZER(root)      \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)       \
struct {        \
```

```
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
 (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)
```

```
#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
```

```
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {    \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
  }       \
 }       \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}       \
        \
attr void       \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
```

```
{       \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oleft, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_RIGHT(head, tmp, oleft, field);\
     tmp = RB_RIGHT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_RIGHT(tmp, field))  \
     RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  } else {      \
   tmp = RB_LEFT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp
 = RB_LEFT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
```

```
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_LEFT(tmp, field) == NULL || \
        RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
     struct type *oright;  \
     if ((oright = RB_RIGHT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oright, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_LEFT(head, tmp, oright, field);\
     tmp = RB_LEFT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_LEFT(tmp, field))  \
     RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  }       \
 }       \
 if
 (elm)       \
  RB_COLOR(elm, field) = RB_BLACK;   \
}        \
        \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{        \
 struct type *child, *parent, *old = elm;   \
 int color;       \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {        \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
  color = RB_COLOR(elm, field);    \
```

```
 if (child)     \
  RB_PARENT(child, field) = parent;  \
 if (parent) {     \
  if (RB_LEFT(parent, field) == elm)  \
   RB_LEFT(parent, field) = child;  \
  else     \
   RB_RIGHT(parent, field) = child; \
  RB_AUGMENT(parent);    \
 } else      \
  RB_ROOT(head)
= child;    \
 if (RB_PARENT(elm, field) == old)   \
  parent = elm;     \
 (elm)->field = (old)->field;    \
 if (RB_PARENT(old, field)) {    \
  if (RB_LEFT(RB_PARENT(old, field), field) == old)\
   RB_LEFT(RB_PARENT(old, field), field) = elm;\
  else     \
   RB_RIGHT(RB_PARENT(old, field), field) = elm;\
  RB_AUGMENT(RB_PARENT(old, field));  \
 } else      \
  RB_ROOT(head) = elm;    \
 RB_PARENT(RB_LEFT(old, field), field) = elm;  \
 if (RB_RIGHT(old, field))    \
  RB_PARENT(RB_RIGHT(old, field), field) = elm; \
 if (parent) {     \
  left = parent;     \
  do {     \
   RB_AUGMENT(left);   \
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }      \
 goto color;     \
}       \
parent = RB_PARENT(elm, field);     \
color = RB_COLOR(elm, field);     \
if (child)      \
 RB_PARENT(child, field) = parent;   \
if (parent) {      \
 if (RB_LEFT(parent, field) == elm)   \
  RB_LEFT(parent, field) = child;   \
 else      \
  RB_RIGHT(parent,
field) = child;  \
 RB_AUGMENT(parent);     \
} else       \
 RB_ROOT(head) = child;     \
color:        \
if (color == RB_BLACK)     \
```

```
 name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);       \
}        \
        \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 RB_SET(elm, parent, field);     \
 if (parent != NULL) {      \
  if (comp < 0)      \
   RB_LEFT(parent, field) = elm;   \
  else       \
   RB_RIGHT(parent, field) = elm;   \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = elm;     \
 name##_RB_INSERT_COLOR(head,
 elm);    \
 return (NULL);       \
}        \
        \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
```

```
 else       \
  return (tmp);     \
 }        \
 return (NULL);       \
}         \
         \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{         \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 return (res);       \
}         \
         \
/* ARGSUSED */        \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{         \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }        \
 return (elm);       \
```

```
}       \
        \
/* ARGSUSED */      \
attr struct type *      \
name##_RB_PREV(struct type *elm)    \
{       \
 if (RB_LEFT(elm, field)) {    \
  elm = RB_LEFT(elm, field);   \
  while (RB_RIGHT(elm, field))   \
   elm = RB_RIGHT(elm, field);  \
 }
 else {      \
  if (RB_PARENT(elm, field) &&   \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);  \
  else {      \
   while (RB_PARENT(elm, field) &&  \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);  \
  }      \
 }       \
 return (elm);      \
}       \
        \
attr struct type *      \
name##_RB_MINMAX(struct name *head, int val)   \
{       \
 struct type *tmp = RB_ROOT(head);   \
 struct type *parent = NULL;    \
 while (tmp) {      \
  parent = tmp;     \
  if (val < 0)     \
   tmp = RB_LEFT(tmp, field);  \
  else      \
   tmp = RB_RIGHT(tmp, field);  \
 }       \
 return (parent);     \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
```

```
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#endif /* _SYS_TREE_H_ */
pkgname=linux-headers
pkgver=6.14.2 # Follow the latest Linux stable
_kernver=${pkgver%.*}
pkgrel=0
pkgdesc="Linux system headers"
url="https://kernel.org/"
arch="all" # Headers are architecture specific
license="GPL-2.0-only"
makedepends="perl"
options="!check !dbg !strip !tracedeps !archcheck"
```

source="https://kernel.org/pub/linux/kernel/v6.x/linux-$_kernver.tar.xz
revert-broken-uapi.patch
0003-remove-inclusion-of-sysinfo.h-in-kernel.h.patch

1.45 utmps-libs 0.1.3.1-r0

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1.46 shadow 4.17.3-r0

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1.47 skalibs-libs 2.14.4.0-r0

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1.48 github.com/grpc-ecosystem/go-grpc-middleware/v2 2.3.2

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1.56 ca-certificates 20250619-r0

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```
#!/usr/bin/env perl
# ***************************************************************************
# *                                  _   _ ____  _
# *  Project                     ___| | | |  _ \| |
# *                             / __| | | | |_) | |
# *                            | (__| |_| |  _ <| |___
# *                             \___|\___/|_| \_\_____|
# *
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 * KIND, either express or implied.
# *
# * SPDX-License-Identifier: curl
# *
# ***************************************************************************
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
```

These are then processed with the OpenSSL commandline tool to produce the
final ca-bundle.crt file.
The script is based on the parse-certs script written by Roland Krikava.
This Perl script works on almost any platform since its only external
dependency is the OpenSSL commandline tool for optional text listing.
Hacked by Guenter Knauf.
#

Found in path(s):
* /ca-certificates-20250619-tar-bz2/ca-certificates-20250619/mk-ca-bundle.pl
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/* c_rehash.c - Create hash symlinks for certificates
* C implementation based on the original Perl and shell versions
*
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1.57 ca-certificates-bundle 20250619-r0

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```
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# ***************************************************************************
# *                                  _   _ ____  _
# *  Project                     ___| | | |  _ \| |
# *                             / __| | | | |_) | |
# *                            | (__| |_| |  _ <| |___
# *                             \___|\___/|_| \_\_____|
# *
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#
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# *
# * SPDX-License-Identifier: curl
# *
# ***************************************************************************
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
# These are then processed with the OpenSSL commandline tool to produce the
# final ca-bundle.crt file.
# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
```

Found in path(s):

* /ca-certificates-20250619-tar-bz2/ca-certificates-20250619/mk-ca-bundle.pl

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```
/* c_rehash.c - Create hash symlinks for certificates
* C implementation based on the original Perl and shell versions
```

```
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*/
```

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1.58 alpine-base 3.22.1-r0

1.58.1 Available under license :

```
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
```

```
 NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
```

```
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6  0001-bsd-games-scores-dir.patch
"
```

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver
```

```
prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

mini_sendmail - accept email on behalf of real sendmail

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SUCH DAMAGE.

```
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
```

```
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
```

```
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html
Contributor: Dhruvin Gandhi <contact@dhru.vin>
Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.1
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312fda3f699cbc7c4fbd47a71e220440fb0
  license_expression-30.4.1.tar.gz
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

/*

```
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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
```

```
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
```

```
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
```

```
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {    \
 (elm)->field.sle_next = (head)->slh_first;   \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {    \
 (slistelm)->field.sle_next =     \
     SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {     \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {        \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
      curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
struct name {        \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
```

```
struct {        \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }        \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
     (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
     (elm)->field.le_next->field.le_prev !=   \
     &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
      __FILE__, __LINE__);    \
```

```
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
     LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
      &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
```

```
    (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
    &(elm2)->field.le_next;    \
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
    (var) != SIMPLEQ_END(head);     \
    (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
    (var) != SIMPLEQ_END(head) &&    \
```

```
    ((next = ((var)->field.sqe_next)), 1);   \
    (var) = (next))

/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
```

```
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
       (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
```

```
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head);     \
     (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head) &&     \
     ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head);     \
     (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head) &&     \
     ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
     (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
 if ((elm)->field.tqe_next &&     \
     (elm)->field.tqe_next->field.tqe_prev !=   \
     &(elm)->field.tqe_next)     \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
      __FILE__, __LINE__);    \
```

```
 if (*(elm)->field.tqe_prev != (elm))    \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
 if ((elm)->field.tqe_next == NULL &&    \
     (head)->tqh_last != &(elm)->field.tqe_next)   \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
      (head), (elm), __FILE__,
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);     \
 (elm)->field.tqe_prev = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
```

```
    TAILQ_END(head))      \
 (elm)->field.tqe_next->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
 (head)->tqh_last = &(elm)->field.tqe_next;  \
 (listelm)->field.tqe_next = (elm);    \
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
 } while (/*CONSTCOND*/0)

 #define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
 } while (/*CONSTCOND*/0)

 #define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
     (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
 } while (/*CONSTCOND*/0)

 #define TAILQ_REPLACE(head, elm, elm2, field) do {   \
       if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
     TAILQ_END(head))        \
             (elm2)->field.tqe_next->field.tqe_prev =  \
                 &(elm2)->field.tqe_next;    \
       else       \
             (head)->tqh_last = &(elm2)->field.tqe_next;  \
       (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
       *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
 } while (/*CONSTCOND*/0)

 #define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
```

```
 TAILQ_INIT((head2));    \
 }       \
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)     \
struct name {       \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)    \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)     \
struct {       \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
```

```
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
    (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
    (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
```

```
 NULL :      \
       ((struct type *)(void *)    \
 ((char *)((head)->stqh_last) - offsetof(struct type, field))))


#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
```

```
  QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }       \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
```

```
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);   \
 (elm)->field.cqe_prev = (head)->cqh_last;   \
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))   \
  (head)->cqh_first = (elm);    \
 else       \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
```

```
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else       \
  (elm)->field.cqe_next->field.cqe_prev =   \
      (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else       \
  (elm)->field.cqe_prev->field.cqe_next =   \
      (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_first)     \
     : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
```

```
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
    ? ((head)->cqh_last)     \
    :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
```

```
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
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```

```
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* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
```

```
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {       \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)
```

```
#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
```

```
}       \
       \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{       \
 name##_SPLAY_MINMAX(head, val);     \
      return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *       \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{       \
  if (SPLAY_EMPTY(head)) {      \
    SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
  } else {       \
    int __comp;       \
    name##_SPLAY(head, elm);     \
    __comp = (cmp)(elm, (head)->sph_root);   \
    if(__comp < 0) {      \
     SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
     SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
     SPLAY_LEFT((head)->sph_root, field) = NULL;  \
    } else if (__comp > 0) {     \
     SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
     SPLAY_LEFT(elm, field) = (head)->sph_root;  \
     SPLAY_RIGHT((head)->sph_root, field) = NULL; \
    } else       \
     return ((head)->sph_root);    \
  }        \
  (head)->sph_root = (elm);      \
  return (NULL);       \
}       \
       \
struct type *       \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{       \
 struct type *__tmp;      \
 if (SPLAY_EMPTY(head))      \
  return (NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
```

```
  } else {      \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }       \
  return (elm);      \
 }        \
 return (NULL);       \
}         \
         \
void         \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{         \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;       \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) > 0){   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }        \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}         \
         \
```

```
/* Splay with either the minimum or the maximum element  \
* Used to find minimum or maximum element in tree.  \
*/       \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{       \
 struct type __node, *__left, *__right, *__tmp;  \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;    \
\
 while (1) {      \
  if (__comp < 0) {    \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)   \
    break;    \
   if (__comp < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;   \
   }     \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {   \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)   \
    break;    \
   if (__comp > 0) {   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
     break;   \
   }     \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }      \
 }       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))
```

```
#define SPLAY_FOREACH(x, name, head)    \
 for ((x) = SPLAY_MIN(name, head);   \
     (x) != NULL;     \
     (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)     \
struct name {       \
 struct type *rbh_root; /* root of the tree */  \
}

#define RB_INITIALIZER(root)     \
 {
 NULL }

#define RB_INIT(root) do {     \
 (root)->rbh_root = NULL;    \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)      \
struct {       \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {    \
 RB_PARENT(elm, field) = parent;    \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;    \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;    \
} while (/*CONSTCOND*/ 0)
```

```
#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {	\
 (tmp) = RB_RIGHT(elm, field);	\
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }	\
 RB_AUGMENT(elm);	\
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else	\
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else	\
  (head)->rbh_root = (tmp);	\
 RB_LEFT(tmp, field) = (elm);	\
 RB_PARENT(elm, field) = (tmp);	\
 RB_AUGMENT(tmp);	\
 if ((RB_PARENT(tmp, field)))	\
  RB_AUGMENT(RB_PARENT(tmp, field));	\
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {	\
 (tmp) = RB_LEFT(elm, field);	\
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }	\
 RB_AUGMENT(elm);	\
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else	\
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else	\
  (head)->rbh_root = (tmp);	\
 RB_RIGHT(tmp, field) = (elm);	\
 RB_PARENT(elm, field) = (tmp);	\
 RB_AUGMENT(tmp);	\
 if ((RB_PARENT(tmp, field)))	\
  RB_AUGMENT(RB_PARENT(tmp, field));	\
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)	\
```

```
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void        \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{        \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
```

```
 } else {      \
  tmp = RB_LEFT(gparent, field);   \
  if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
   RB_COLOR(tmp, field) = RB_BLACK; \
   RB_SET_BLACKRED(parent, gparent, field);\
   elm = gparent;    \
   continue;    \
  }      \
  if (RB_LEFT(parent, field) == elm)
 {  \
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   tmp = parent;    \
   parent = elm;    \
   elm = tmp;    \
  }      \
  RB_SET_BLACKRED(parent, gparent, field); \
  RB_ROTATE_LEFT(head, gparent, tmp, field); \
 }       \
 }       \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}        \
        \
attr void        \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{        \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
```

```
        != NULL)   \
     RB_COLOR(oleft, field) = RB_BLACK;\
    RB_COLOR(tmp, field) = RB_RED; \
    RB_ROTATE_RIGHT(head, tmp, oleft, field);\
    tmp = RB_RIGHT(parent, field); \
   }     \
  RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
  RB_COLOR(parent, field) = RB_BLACK; \
  if (RB_RIGHT(tmp, field))  \
   RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
  RB_ROTATE_LEFT(head, parent, tmp, field);\
  elm = RB_ROOT(head);   \
  break;     \
 }      \
} else {      \
 tmp = RB_LEFT(parent, field);   \
 if (RB_COLOR(tmp, field) == RB_RED) {  \
  RB_SET_BLACKRED(tmp, parent, field); \
  RB_ROTATE_RIGHT(head, parent, tmp, field);\
  tmp
= RB_LEFT(parent, field);  \
 }      \
 if ((RB_LEFT(tmp, field) == NULL ||  \
     RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
     (RB_RIGHT(tmp, field) == NULL ||  \
     RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
  RB_COLOR(tmp, field) = RB_RED;  \
  elm = parent;    \
  parent = RB_PARENT(elm, field);  \
 } else {     \
  if (RB_LEFT(tmp, field) == NULL ||\
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
   struct type *oright;  \
   if ((oright = RB_RIGHT(tmp, field)) \
       != NULL)   \
    RB_COLOR(oright, field) = RB_BLACK;\
   RB_COLOR(tmp, field) = RB_RED; \
   RB_ROTATE_LEFT(head, tmp, oright, field);\
   tmp = RB_LEFT(parent, field); \
   }     \
  RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
  RB_COLOR(parent, field) = RB_BLACK; \
  if (RB_LEFT(tmp, field))  \
   RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
  RB_ROTATE_RIGHT(head, parent, tmp, field);\
  elm = RB_ROOT(head);   \
  break;     \
 }      \
```

```
 }      \
 }      \
 if
 (elm)      \
  RB_COLOR(elm, field) = RB_BLACK;   \
}       \
       \
attr struct type *      \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{       \
 struct type *child, *parent, *old = elm;   \
 int color;      \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {       \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
  color = RB_COLOR(elm, field);    \
  if (child)      \
   RB_PARENT(child, field) = parent;  \
  if (parent) {      \
   if (RB_LEFT(parent, field) == elm)  \
    RB_LEFT(parent, field) = child;  \
   else      \
    RB_RIGHT(parent, field) = child; \
   RB_AUGMENT(parent);    \
  } else       \
   RB_ROOT(head)
 = child;    \
  if (RB_PARENT(elm, field) == old)   \
   parent = elm;     \
  (elm)->field = (old)->field;    \
  if (RB_PARENT(old, field)) {    \
   if (RB_LEFT(RB_PARENT(old, field), field) == old)\
    RB_LEFT(RB_PARENT(old, field), field) = elm;\
   else      \
    RB_RIGHT(RB_PARENT(old, field), field) = elm;\
   RB_AUGMENT(RB_PARENT(old, field));  \
  } else       \
   RB_ROOT(head) = elm;    \
  RB_PARENT(RB_LEFT(old, field), field) = elm;  \
  if (RB_RIGHT(old, field))    \
```

```
  RB_PARENT(RB_RIGHT(old, field), field) = elm; \
 if (parent) {      \
  left = parent;     \
  do {      \
   RB_AUGMENT(left);   \
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }       \
 goto color;      \
}       \
 parent = RB_PARENT(elm, field);     \
 color = RB_COLOR(elm, field);     \
 if (child)       \
  RB_PARENT(child, field) = parent;   \
 if (parent) {       \
  if (RB_LEFT(parent, field) == elm)   \
   RB_LEFT(parent, field) = child;   \
  else       \
   RB_RIGHT(parent,
 field) = child;  \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = child;     \
color:        \
 if (color == RB_BLACK)      \
  name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);       \
}        \
        \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 RB_SET(elm, parent, field);     \
 if (parent != NULL) {      \
```

```
 if (comp < 0)      \
  RB_LEFT(parent, field) = elm;   \
 else       \
  RB_RIGHT(parent, field) = elm;   \
 RB_AUGMENT(parent);     \
 } else       \
 RB_ROOT(head) = elm;     \
 name##_RB_INSERT_COLOR(head,
 elm);    \
 return (NULL);       \
}        \
       \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 return (NULL);       \
}        \
       \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
```

```
 }       \
 return (res);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{        \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
```

```
        \
attr struct type *      \
name##_RB_MINMAX(struct name *head, int val)    \
{       \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))
```

```
#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
    ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
     (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
    ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
     (x) = (y))

#endif /* _SYS_TREE_H_ */
```

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src/rdxxhash.[ch] src/lz4*.[ch]: git@github.com:lz4/lz4.git 5ff839680134437dbf4678f3d0c7b371d84f4964

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Format: http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: librdkafka
Source: https://github.com/confluentinc/librdkafka

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This license covers src/rdhdrhistogram.c which is a C port of
Coda Hale's Golang HdrHistogram https://github.com/codahale/hdrhistogram
at revision 3a0bb77429bd3a61596f5e8a3172445844342120

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1.60 alpine-release 3.22.1-r0

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```
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
```

```
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
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SOFTWARE.
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
```

```
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6  0001-bsd-games-scores-dir.patch
"
```

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# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
```

```
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
```

```
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html
Contributor: Dhruvin Gandhi <contact@dhru.vin>
Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.1
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312
fda3f699cbc7c4fbd47a71e220440fb0
  license_expression-30.4.1.tar.gz
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and

```
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
```

```
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
```

```
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {   \
 (elm)->field.sle_next = (head)->slh_first;   \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {   \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {    \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
     curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)



/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
```

```
struct name {       \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {        \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
     (head)->lh_first->field.le_prev != &(head)->lh_first) \
```

```
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
     (elm)->field.le_next->field.le_prev !=   \
     &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
      __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
     LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
      &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
```

```
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
      (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)
```

```
#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
     (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head) &&    \
     ((next = ((var)->field.sqe_next)), 1);   \
     (var) = (next))

/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
     == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
```

```
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {      \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
      (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
       ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {       \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {       \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
```

```
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head);     \
     (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head) &&     \
     ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head);     \
     (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head) &&     \
     ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
     (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
```

```
 QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
     __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
 if ((elm)->field.tqe_next &&     \
    (elm)->field.tqe_next->field.tqe_prev !=   \
    &(elm)->field.tqe_next)     \
 QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
     __FILE__, __LINE__);    \
 if (*(elm)->field.tqe_prev != (elm))    \
 QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
     __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
 if ((elm)->field.tqe_next == NULL &&    \
    (head)->tqh_last != &(elm)->field.tqe_next)   \
 QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
     (head), (elm), __FILE__,
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);     \
 (elm)->field.tqe_prev = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
```

```
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
     TAILQ_END(head))      \
  (elm)->field.tqe_next->field.tqe_prev =   \
      &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (listelm)->field.tqe_next = (elm);    \
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
      (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
       if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
     TAILQ_END(head))        \
             (elm2)->field.tqe_next->field.tqe_prev =  \
                 &(elm2)->field.tqe_next;    \
       else       \
             (head)->tqh_last = &(elm2)->field.tqe_next;  \
       (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
       *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
```

```
 field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
struct name {       \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {       \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
```

```
 (head)->stqh_last = &(elm)->field.stqe_next;  \
(head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {   \
(elm)->field.stqe_next = NULL;     \
*(head)->stqh_last = (elm);     \
(head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
 (head)->stqh_last = &(elm)->field.stqe_next;  \
(listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE_HEAD(head, field) do {    \
if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
== NULL) \
 (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
if ((head)->stqh_first == (elm)) {    \
 STAILQ_REMOVE_HEAD((head), field);   \
} else {       \
 struct type *curelm = (head)->stqh_first;  \
 while (curelm->field.stqe_next != (elm))   \
  curelm = curelm->field.stqe_next;  \
 if ((curelm->field.stqe_next =    \
  curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
}       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
for ((var) = ((head)->stqh_first);    \
 (var);       \
 (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
for ((var) = STAILQ_FIRST((head));    \
    (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
    (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
if (!STAILQ_EMPTY((head2))) {     \
 *(head1)->stqh_last
```

```
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :      \
       ((struct type *)(void *)    \
  ((char *)((head)->stqh_last) - offsetof(struct type, field))))


#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
```

```
        __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
     (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
        __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }       \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
```

```
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
```

```
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);   \
 (elm)->field.cqe_prev = (head)->cqh_last;   \
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))   \
  (head)->cqh_first = (elm);    \
 else       \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else       \
  (elm)->field.cqe_next->field.cqe_prev =   \
      (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else       \
  (elm)->field.cqe_prev->field.cqe_next =   \
      (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
```

```
#define CIRCLEQ_EMPTY(head)      \
  (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
    ? ((head)->cqh_first)     \
    : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
    ? ((head)->cqh_last)     \
    :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
```

```
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare
```

```
 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
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* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/
```

```
#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
```

```
}

#define SPLAY_INITIALIZER(root)      \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {        \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
```

```
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}        \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{        \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}
```

```
/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *       \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{       \
  if (SPLAY_EMPTY(head)) {      \
    SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
  } else {       \
    int __comp;       \
    name##_SPLAY(head, elm);     \
    __comp = (cmp)(elm, (head)->sph_root);   \
    if(__comp < 0) {      \
     SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
     SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
     SPLAY_LEFT((head)->sph_root, field) = NULL;  \
    } else if (__comp > 0) {     \
     SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
     SPLAY_LEFT(elm, field) = (head)->sph_root;  \
     SPLAY_RIGHT((head)->sph_root, field) = NULL; \
    } else       \
     return ((head)->sph_root);    \
  }        \
  (head)->sph_root = (elm);      \
  return (NULL);       \
}       \
       \
struct type *       \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{       \
 struct type *__tmp;      \
 if (SPLAY_EMPTY(head))      \
  return (NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {      \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }       \
  return (elm);      \
 }       \
 return (NULL);       \
```

```
}       \
       \
void       \
name##_SPLAY(struct
 name *head, struct type *elm)  \
{       \
 struct type __node, *__left, *__right, *__tmp;  \
 int __comp;      \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;    \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {    \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)   \
    break;    \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;   \
   }     \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)   \
    break;    \
   if ((cmp)(elm, __tmp) > 0){   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;   \
   }     \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }      \
 }       \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}       \
       \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/       \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{       \
 struct type __node, *__left, *__right, *__tmp;  \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;    \
```

```
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp > 0) {    \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)     \
 for ((x) = SPLAY_MIN(name, head);    \
     (x) != NULL;      \
     (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)      \
struct name {        \
```

```
 struct type *rbh_root; /* root of the tree */   \
}

#define RB_INITIALIZER(root)      \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)       \
struct {        \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
```

```
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
```

```
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
```

```
 {  \
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   tmp = parent;    \
   parent = elm;    \
   elm = tmp;    \
  }      \
  RB_SET_BLACKRED(parent, gparent, field); \
  RB_ROTATE_LEFT(head, gparent, tmp, field); \
 }       \
 }       \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}        \
        \
attr void        \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{        \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {    \
   tmp = RB_RIGHT(parent, field);    \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oleft, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_RIGHT(head, tmp, oleft, field);\
     tmp = RB_RIGHT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_RIGHT(tmp, field))  \
```

```
    RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
   RB_ROTATE_LEFT(head, parent, tmp, field);\
   elm = RB_ROOT(head);   \
   break;     \
  }      \
 } else {      \
  tmp = RB_LEFT(parent, field);   \
  if (RB_COLOR(tmp, field) == RB_RED) {  \
   RB_SET_BLACKRED(tmp, parent, field); \
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   tmp
= RB_LEFT(parent, field);  \
  }      \
  if ((RB_LEFT(tmp, field) == NULL ||  \
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
   RB_COLOR(tmp, field) = RB_RED;  \
   elm = parent;    \
   parent = RB_PARENT(elm, field);  \
  } else {     \
   if (RB_LEFT(tmp, field) == NULL || \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
    struct type *oright;  \
    if ((oright = RB_RIGHT(tmp, field)) \
        != NULL)   \
     RB_COLOR(oright, field) = RB_BLACK;\
    RB_COLOR(tmp, field) = RB_RED; \
    RB_ROTATE_LEFT(head, tmp, oright, field);\
    tmp = RB_LEFT(parent, field); \
   }     \
   RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
   RB_COLOR(parent, field) = RB_BLACK; \
   if (RB_LEFT(tmp, field))  \
    RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   elm = RB_ROOT(head);   \
   break;     \
  }      \
 }       \
}        \
if
(elm)       \
 RB_COLOR(elm, field) = RB_BLACK;   \
}        \
        \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
```

```
{       \
 struct type *child, *parent, *old = elm;   \
 int color;      \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {       \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
  color = RB_COLOR(elm, field);    \
  if (child)      \
   RB_PARENT(child, field) = parent;  \
  if (parent) {      \
   if (RB_LEFT(parent, field) == elm)  \
    RB_LEFT(parent, field) = child;  \
   else      \
    RB_RIGHT(parent, field) = child; \
   RB_AUGMENT(parent);    \
  } else       \
   RB_ROOT(head)
 = child;    \
  if (RB_PARENT(elm, field) == old)   \
   parent = elm;     \
  (elm)->field = (old)->field;    \
  if (RB_PARENT(old, field)) {    \
   if (RB_LEFT(RB_PARENT(old, field), field) == old)\
    RB_LEFT(RB_PARENT(old, field), field) = elm;\
   else      \
    RB_RIGHT(RB_PARENT(old, field), field) = elm;\
   RB_AUGMENT(RB_PARENT(old, field));  \
  } else       \
   RB_ROOT(head) = elm;    \
  RB_PARENT(RB_LEFT(old, field), field) = elm;  \
  if (RB_RIGHT(old, field))    \
   RB_PARENT(RB_RIGHT(old, field), field) = elm; \
  if (parent) {      \
   left = parent;     \
   do {      \
    RB_AUGMENT(left);   \
   } while ((left = RB_PARENT(left, field)) != NULL); \
  }       \
  goto color;      \
 }       \
```

```
 parent = RB_PARENT(elm, field);     \
 color = RB_COLOR(elm, field);     \
 if (child)       \
  RB_PARENT(child, field) = parent;   \
 if (parent) {       \
  if (RB_LEFT(parent, field) == elm)   \
   RB_LEFT(parent, field) = child;   \
  else       \
   RB_RIGHT(parent,
 field) = child;  \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = child;     \
color:        \
 if (color == RB_BLACK)      \
  name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);       \
}        \
       \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 RB_SET(elm, parent, field);     \
 if (parent != NULL) {      \
  if (comp < 0)      \
   RB_LEFT(parent, field) = elm;   \
  else       \
   RB_RIGHT(parent, field) = elm;   \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = elm;     \
 name##_RB_INSERT_COLOR(head,
```

```
 elm);    \
 return (NULL);       \
}         \
         \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{         \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 return (NULL);       \
}         \
         \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{         \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 return (res);       \
}         \
         \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{         \
```

```
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);    \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
attr struct type *       \
name##_RB_MINMAX(struct name *head, int val)    \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
```

```
 if (val < 0)      \
  tmp = RB_LEFT(tmp, field);   \
 else       \
  tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
```

```
head, y)   \
for ((x) = RB_MAX(name, head);     \
    ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
     (x) = (y))

#endif /* _SYS_TREE_H_ */
```

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1.62 github.com/google/uuid 1.6.0

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1.63 openssl 3.0.15

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1.65 ssl-client 1.37.0-r19

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Found in path(s):
* /aports-3-22-stable-main-busybox-zip/aports-3.22-stable-main-busybox/main/busybox/0024-umount-Implement-O-option-to-unmount-by-mount-option.patch
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/*
* depmod - generate modules.dep
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@@ -25,6 +25,24 @@
#include "modutils.h"
#include <sys/utsname.h> /* uname() */

+#define INDEX_MINCHAR 32
+#define INDEX_MAXCHAR 128
+
+typedef struct index_node {
+ char *prefix;
+ llist_t *values;
+ struct index_node *children[INDEX_MAXCHAR-INDEX_MINCHAR];
+} index_node;
+
+struct globals {
+ module_db db;
+ index_node *root_node;
+} FIX_ALIASING;
+#define G (*ptr_to_globals)
+#define INIT_G() do { \

```
+ SET_PTR_TO_GLOBALS(xzalloc(sizeof(G))); \
+} while (0)
+
/*
* Theory of operation:
* - iterate over all modules and record their full path
@@ -53,18 +71,12 @@ static int FAST_FUNC parse_module(struct recursive_state
 *state,

for (ptr = image; ptr < image + len - 10; ptr++) {
if (is_prefixed_with(ptr, "depends=")) {
-   char *u;
-
ptr += 8;
-   for (u = ptr; *u; u++)
-    if (*u == '-')
-     *u = '_';
-   ptr += string_to_llist(ptr, &e->deps, ",");
+   string_to_llist(replace_underscores(ptr), &e->deps, ",");
} else if (ENABLE_FEATURE_MODUTILS_ALIAS
&& is_prefixed_with(ptr, "alias=")
) {
-   llist_add_to(&e->aliases, xstrdup(ptr + 6));
-   ptr += strlen(ptr);
+   llist_add_to(&e->aliases, replace_underscores(xstrdup(ptr + 6)));
} else if (ENABLE_FEATURE_MODUTILS_SYMBOLS
&& is_prefixed_with(ptr, "__ksymtab_")
) {
@@ -74,9 +86,10 @@ static int FAST_FUNC parse_module(struct recursive_state *state,
) {
continue;
}
-   llist_add_to(&e->symbols, xstrdup(ptr));
-   ptr += strlen(ptr);
-  }
+   llist_add_to(&e->symbols, xasprintf("symbol:%s", ptr));
+  } else
+   continue;
+  ptr += strlen(ptr);
}
free(image);

@@ -108,12 +121,6 @@ static void order_dep_list(module_db *modules, module_entry *start, llist_t
 *add
}
}

-static void xfreopen_write(const char *file, FILE *f)
```

-{
- if (freopen(file, "w", f) == NULL)
- bb_perror_msg_and_die("can't open '%s'", file);
-}
-
//usage:#if !ENABLE_MODPROBE_SMALL
//usage:#define depmod_trivial_usage "[-n] [-b BASE] [VERSION] [MODFILES]..."
//usage:#define depmod_full_usage "\n\n"
@@ -167,6 +174,169 @@ enum {
OPT_C = (1 << 9), /* -C,--config etc_modules_conf: ignored */

Found in path(s):
* /aports-3-22-stable-main-busybox-zip/aports-3.22-stable-main-busybox/main/busybox/0018-depmod-support-generating-kmod-binary-index-files.patch
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*/

Found in path(s):
* /aports-3-22-stable-main-busybox-zip/aports-3.22-stable-main-busybox/main/busybox/bbsuid.c

1.66 openssl 3.5.2-r0

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1.68 x-sys 0.35.0

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1.69 x-crypto 0.41.0

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1.70 golang 1.25.0

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```
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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }
```

```
 f, err := os.Open(path)
 if err != nil {
  t.Error(err)
  return nil
 }
 defer f.Close()
 n, err := f.Read(buf)
 if err != nil && err != io.EOF {
  t.Error(err)
  return nil
 }
 b := buf[:n]
 if bytes.Contains(b, copyright) {
  return nil
 }
 for _, ok := range permitted {
  if bytes.HasPrefix(b, ok) {
   return nil
  }
 }
 t.Errorf("%s: missing copyright notice", path)
 return nil
})
}
```

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1.71 github.com/confluentinc/confluent-kafka-go/v2 2.11.1

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1.77 grpc-go 1.75.0

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1.78 google-golang-org-grpc 1.75.0

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1.79 github.com/gabriel-vasile/mimetype 1.4.10

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1.80 cjson 1.7.18-r1

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1.81 curl 8.14.1-r1

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1.82 github.com/aws/smithy-go 1.23.0

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1.83 github.com/aws/aws-sdk-go-v2/service/internal/accept-encoding 1.13.1

1.83.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt

```
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
```

```
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]
```

```
jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
```

are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer

InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step

```
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
```

```
//
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
}
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
        "type": "structure",
        "members": {
           "message": {
              "target": "smithy.api#String"
           }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
```

```
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 2
                }
              }
            },
            "DomainCredentialsProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
```

```
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http": {
                "code": 200,
```

```
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {
```

```
    "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
               "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
```

```
                "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
```

```
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n          </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
```

```
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
```

```
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
```

```
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                  "smithy.api#length": {
                     "min": 1
                  },

    "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
         "type": "structure",
         "members": {
            "Attribute": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
               }
            },
            "Operation": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
               }
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
 subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
            }
        },
```

```
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
```

```
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
```

```
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

             "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region":
{
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
```

```
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [
              {

                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "endpoint": {
              "url": {
                "ref": "Endpoint"
              },

"properties": {},
                "headers": {}
            },
            "type": "endpoint"
          }
        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
```

```
                {
                  "fn": "aws.partition",

                 "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },

true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {

"fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
```

```
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }

            ]
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [

{
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [

                {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {

          "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
```

```
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

    }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {

        "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]

         }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
```

```
                                    },
                                    "type": "endpoint"
                                }

                            ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
```

```
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

    "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
```

```
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
```

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                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                 }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
```

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 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
```

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            },
            "LicenseServerEndpointId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
               }
            },
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
               }
            },
            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
               }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
               }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
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      "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "PROVISIONING",
          "value": "PROVISIONING",
          "documentation": ""
        },
        {
          "name": "PROVISIONING_FAILED",

         "value": "PROVISIONING_FAILED",
          "documentation": ""
        },
        {
          "name": "PROVISIONED",
          "value": "PROVISIONED",
          "documentation": ""
        },
        {
          "name": "DELETING",
          "value": "DELETING",
          "documentation": ""
        },
        {
          "name": "DELETION_FAILED",
          "value": "DELETION_FAILED",
          "documentation": ""
        },
        {
          "name": "DELETED",
          "value": "DELETED",
          "documentation": ""
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
      "smithy.api#enum": [
        {
          "name": "HEALTHY",
          "value": "HEALTHY",
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                "documentation": ""
              },
              {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
```

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            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n       </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                  "smithy.api#required": {}
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
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empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",

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                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                 "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
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            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
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  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
               }
```

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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
         "type": "structure",

       "members": {
            "ProductUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
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  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListUserAssociations"
       },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "InstanceUserSummaries"
      }
    }
  },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
```

```
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

           "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                  "smithy.api#required": {}
               }
            },

          "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                  "smithy.api#required": {}
               }
            },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
```

```
            "target": "smithy.api#String",

        "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

       "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
```

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configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "RDS_SAL",
                  "value": "RDS_SAL",
                  "documentation": ""
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
            "type": "structure",
            "members": {
              "message": {
                "target": "smithy.api#String"
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
              "smithy.api#error": "client"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#Settings": {

        "type": "structure",
            "members": {
              "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                  "smithy.api#length": {
                    "min": 1
                  },
                  "smithy.api#required": {}
                }
              },
              "SecurityGroupId": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
```

```
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
```

```
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
               }
             }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
         "type": "list",
         "member": {
            "target": "smithy.api#String"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
         }
      },
```

```
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
```

```
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
          "type": "structure",
           "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
              }
            },
            "UpdateSettings":
 {
              "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
              "traits": {
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash

```
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
```

```
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
```

```
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
```

```
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
```

```
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
```

```
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
```

Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

    {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
```

```
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>The instance type of the resource.</p>"
               }
            },
            "AccountID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

  "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
          }
        },
        "SubscriptionProviderCreateTime": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
```

```
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
```

```
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

          }
          ],
          "type": "tree"
        },
        {
          "conditions": [],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {

          "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
```

```
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

        },
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
```

```
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [

                                                     {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],

        "rules": [
                                                {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],

                                "type": "tree"
                                        }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
```

```
                                {

            "conditions": [
                                    {
                                       "fn": "booleanEquals",
                                       "argv": [
                                          {
                                             "ref": "UseFIPS"
                                          },
                                          true
                                       ]
                                    }
                                 ],
                                 "rules": [
                                    {
                                       "conditions": [
                                          {

                           "fn": "booleanEquals",
                                             "argv": [
                                                {
                                                   "fn": "getAttr",
                                                   "argv": [
                                                      {
                                                         "ref": "PartitionResult"
                                                      },
                                                      "supportsFIPS"
                                                   ]
                                                },
                                                true

                                          ]
                                          }
                                       ],
                                       "rules": [
                                          {
                                             "conditions": [],
                                             "rules": [
                                                {
                                                   "conditions": [],
                                                   "endpoint": {
                                                      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                      "headers": {}
                                                   },
                                                   "type": "endpoint"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
but this partition does not support FIPS",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true

      ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {

                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }
                  ]
                }
```

```
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [

        {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
```

```
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
```

```
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },

    {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
```

```
                }
            },
            {
                "documentation": "Missing region",

            "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
```

```
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
```

```
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
```

```
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n        <p>The valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
      length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
```

```
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
```

```
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

"name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
```

```
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
 Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
             },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
```

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                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
```

```
                "value": "INVALID",
                "documentation": "INVALID status"
              },
              {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
```

```
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
```

```
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
```

```
    "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
 {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
```

```
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }

          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
```

```
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
             }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
```

```
            "smithy.api#error": "client"
          }
        }
      }
    }
}
```

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.84 github.com/aws/aws-sdk-go-v2/aws/protocol/eventstream 1.7.1

1.84.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
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ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
```

```
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
```

```
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
```

```
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

```
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
```

```
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
             }
         },
         "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
```

```
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider":
 {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
```

```
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
```

```
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
```

true

```
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

    "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
```

```
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
```

```
        "endpoint":
{
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
```

```
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
```

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      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

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            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
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                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
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            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
```

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            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
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            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
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            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Product</p>\n          </li>\n          <li>\n            <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
 "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for this product
```

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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
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            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
```

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
```

```
        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StartProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
```

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                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http":
{
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
```

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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
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            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
```

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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
```

```
        },
        "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
    <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
```

```
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
```

```
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
```

```
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
```

```
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //

```
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
```

```
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
```

```
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/smithy-go/middleware"

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
```

```
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                   "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                   "smithy.api#required": {}
                 }
               }
             },
             "traits": {
               "smithy.api#input": {}
             }
           },
           "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
             "type": "structure",
             "members": {},
             "traits": {
               "smithy.api#output": {}
             }
           },
           "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
             "type": "structure",
             "members": {
               "Name": {
                 "target": "smithy.api#String",
                 "traits": {
                   "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                  }
               },
               "Values": {
                 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                   "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                 }
               },
               "Operator": {
                 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                 "traits": {
                   "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                 }
               }
             },
             "traits": {
               "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
             }
           },
           "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
             "type":
```

```
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

```
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
          "type": "structure",
          "members": {
            "AmiId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
              }
            },
            "InstanceID": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
```

```
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
```

```
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
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        "rules": [
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            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

```
                        true
                    ]
                }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
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                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
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                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
```

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  {
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      {
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        "argv": [
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            "ref": "Region"
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        ]
      }
    ],
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          {

"fn": "aws.partition",
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                "ref": "Region"
              }
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            "assign": "PartitionResult"
          }
        ],
        "rules": [
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            "conditions": [
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                "argv": [
                  {

                "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
```

```
],
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                                      {
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                                          {
                                            "fn": "booleanEquals",
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                                              true,
                                              {
                                                "fn": "getAttr",
                                                "argv": [
                                                  {
                                                    "ref": "PartitionResult"

                                },
                                                    "supportsFIPS"
                                                  ]
                                                }
                                              ]
                                            },
                                            {
                                              "fn": "booleanEquals",
                                              "argv": [
                                                true,
                                                {
                                                  "fn": "getAttr",
                                                  "argv": [

                                                   {
                                                      "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                  ]
                                                }
                                              ]
                                            }
                                          ],
                                          "rules": [
                                            {
                                              "conditions": [],

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                                                {
                                                  "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
```

```
                "headers": {}
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              "type": "endpoint"
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          ],

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      {
        "conditions": [],
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one or both",
        "type": "error"
      }
    ],
    "type": "tree"
  },
  {

"conditions": [
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        "argv": [
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          },
          true
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {

"fn": "booleanEquals",
            "argv": [
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
```

```
                    },
                    true

                ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled
but this partition does not support FIPS",
        "type": "error"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true

    ]
    }
```

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                ],
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                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
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                        "rules": [
                            {
                                "conditions": [],
                                "rules": [

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"

                    }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
```

```
                                ],
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                            },
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                                "conditions": [],
                                "rules": [
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
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                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
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```
      }
    },
    {

  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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        }

     },
      "params": {
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        "UseFIPS": true,
        "UseDualStack": false
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      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
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        }
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      "params": {
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        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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```
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },

    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
```

```
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {

      "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",

            "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"
        },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
            <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
 <li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
 one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
 <p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
         "members": {
            "Instances": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n         <p>The valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n                  <code>contains</code>\n               </p>\n            </li>\n            <li>\n               <p>\n                  <code>equals</code>\n               </p>\n            </li>\n            <li>\n               <p>\n                  <code>Notequal</code>\n               </p>\n            </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
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              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
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                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
              "traits": {
                "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
```

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    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
             },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
```

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    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
```

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

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            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
     },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
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            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n       Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n       Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

       "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
```

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
"list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
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        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

  "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input":
 {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
```

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      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {

 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required":
{}
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
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                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
              }
            }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }

      },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }
```

```
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         },
         "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
            "type": "structure",
            "members": {
               "message": {
                  "target": "smithy.api#String"
               }
            },
            "traits": {
               "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
               "smithy.api#error": "client"
            }
         }
      }
   }
```


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AssociateLicense
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legacyEndpointContextSetter

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OperationInputValidation
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Serialize stack step
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Initialize stack step

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InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

InterceptTransmit

1.85 aws-sdk-go-v2-aws-protocol-eventstream 1.7.1

1.85.1 Available under license :

GetLicense
Initialize stack step
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RegisterServiceMetadata
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spanBuildRequestStart
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InterceptAfterSerialization
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UserAgent
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Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step

```
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
```

```
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
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InterceptAfterSerialization
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
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InterceptAfterSigning
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AddRawResponseToMetadata
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ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
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InterceptBeforeDeserialization
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CheckoutLicense
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spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
```

```
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
}
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
```

```
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n             <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
```

```
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                  "smithy.api#required": {}
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
               }
            }
         },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
```

```
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
      "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
            "smithy.api#length": {
              "min": 1
            },
```

```
    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
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        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

          "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
```

```
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
```

```
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

true

```
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
```

"fn": "booleanEquals",

```
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
```

```
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

 {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
```

```
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [

        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

    "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

        "conditions": [
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]

        }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }

            ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
```

```
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
```

```
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
```

```
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
```

```
            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
 disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
```

```
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
```

```
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
             "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
```

```
            }
          },
          "NextToken":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/ListLicenseServerEndpoints"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "LicenseServerEndpoints"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
      "type": "structure",
      "members": {
```

```
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

     "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
          },
          "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
```

```
 "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
```

```
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {

      "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
             "traits": {
               "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
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```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
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```
                "smithy.api#required": {}
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
```

```
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
```

```
        }
      }
    }
  }
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
```

```
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
```

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
```

```
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
```

```
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
```

```
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.
    KeyFingerprint *string

    // Product SKU.
    //
    // This member is required.
    ProductSKU *string

    // License beneficiary.
    Beneficiary *string

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the checkout license.
```

```
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
```

```
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
```

```
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
```

```
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string
```

```
 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
              }
            },
            "Operator": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
              "traits": {
                "smithy.api#documentation": "<p>An operator for filtering results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
          "type":
 "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
          },
          "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
```

```
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
          "type": "structure",
          "members": {}
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
```

```
            "target": "smithy.api#String",

    "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
```

registered \n\t\t\tthird-party Linux subscription provider. "
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 " An exception occurred with the service. ",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
```

```
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

```
                "argv": [
                  {

              "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"

        },
                              "supportsFIPS"
                          ]
                        }
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [

                           {
                                "ref": "PartitionResult"
```

```
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                        "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

                "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
```

```
but this partition does not support FIPS",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true

                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "rules": [

        {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
```

```
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"

                            }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
```

```
        ],
        "type": "tree"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
```

```
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

        },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
```

```
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }

   },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
```

```
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }

                },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
                    }
                  },
```

```
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
```

```
        {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {

          "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",

              "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
```

```
<li>\n <p>\n <code>DualSubscription</code>\n </p>\n </li>\n
<li>\n <p>\n <code>InstanceID</code>\n </p>\n </li>\n <li>\n
<p>\n <code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter:</p>\n <ul>\n
<li>\n <p>\n <code>contains</code>\n </p>\n </li>\n <li>\n
<p>\n <code>equals</code>\n </p>\n </li>\n <li>\n
<p>\n <code>Notequal</code>\n </p>\n </li>\n </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
      "type": "structure",
      "members": {
        "Instances": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
```

```
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name.</p>\n <p>The valid names for this filter are:</p>\n <ul>\n <li>\n <p>\n <code>Subscription</code>\n </p>\n </li>\n </ul>\n <p>The valid Operators for this filter are:</p>\n <ul>\n <li>\n <p>\n <code>contains</code>\n </p>\n </li>\n <li>\n <p>\n <code>equals</code>\n </p>\n </li>\n <li>\n <p>\n <code>Notequal</code>\n </p>\n </li>\n </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
```

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

```
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

   "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
             "traits": {
               "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
               "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
               "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
               "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
```

```
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
 Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
 that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
 the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
```

access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {

```
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
              },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
            }
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            },
            "smithy.api#uniqueItems": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
    },
    "value": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the subscription.</p>"
        }
      },
      "Type": {
        "target": "smithy.api#String",
        "traits": {

   "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
        }
      },
      "InstanceCount": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
    "type": "list",

   "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
    }
  },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

  "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
```

```
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/UpdateServiceSettings"
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```
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }

          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
```

settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
                }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
          "traits": {
              "smithy.api#documentation": " The provided input is not valid. Try your request again. ",
              "smithy.api#error": "client"
          }
      }
  }
}

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spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
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RecordResponseTiming
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1.86 genproto-googleapis-rpc 0.0.0-20250826171959-ef028d996bc1

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1.87 smithy-go 1.23.0

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1.89 aws-sdk-go-v2-service-internal-accept-encoding 1.13.1

1.89.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing

```
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
```

```
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string
```

```
 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]
```

```
  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
```

```
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
}
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
```

```
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n             <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
```

```
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
```

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                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                  "smithy.api#required": {}
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
               }
            }
         },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
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```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoint": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
              "traits": {
                "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

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                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
```

```
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
         "type": "structure",
         "members": {
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                  "smithy.api#length": {
                     "min": 1
                  },
```

```
    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
```

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                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
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        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
```

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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
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        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

          "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
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```
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
```

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                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
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                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

true

```
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
```

"fn": "booleanEquals",

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                            "argv": [
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                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
```

```
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

 {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
```

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                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [

        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
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    "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

        "conditions": [
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]

        }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }

            ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
```

```
                                "type": "error"
                            }
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                        "type": "tree"
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                    {
                        "conditions": [],
                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
```

```
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
```

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            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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```
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
 disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
```

```
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
```

```
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
             "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
```

```
            }
          },
          "NextToken":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/ListLicenseServerEndpoints"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "LicenseServerEndpoints"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
      "type": "structure",
      "members": {
```

```
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListProductSubscriptions"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

     "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
          },
          "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
```

```
 "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
```

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            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {

      "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
             "traits": {
               "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
               "smithy.api#required": {}
             }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                "smithy.api#httpLabel": {},
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```
                "smithy.api#required": {}
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
```

```
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
```

```
        }
      }
    }
  }
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
```

```
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
```

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
```

```
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
```

```
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
```

```
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.
    KeyFingerprint *string

    // Product SKU.
    //
    // This member is required.
    ProductSKU *string

    // License beneficiary.
    Beneficiary *string

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the checkout license.
```

```
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
```

```
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
```

```
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
```

```
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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```
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SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string
```

```
 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
              }
            },
            "Operator": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
              "traits": {
                "smithy.api#documentation": "<p>An operator for filtering results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
          "type":
 "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
          },
          "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
```

```
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
          "type": "structure",
          "members": {}
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
```

```
            "target": "smithy.api#String",

    "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
```

```
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
```

```
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

```
                "argv": [
                  {

                "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"

},
                              "supportsFIPS"
                          ]
                        }
                      ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [

                       {
                            "ref": "PartitionResult"
```

```
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

                "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
```

```
but this partition does not support FIPS",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true

                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "rules": [

        {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
```

```
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"

                            }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
```

```
        ],
        "type": "tree"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
```

```
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

        },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
```

```
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }

   },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
```

```
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }

                },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
                    }
                  },
```

```
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
```

```
        {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {

           "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",

              "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
```

```
<li>\n <p>\n <code>DualSubscription</code>\n </p>\n </li>\n
<li>\n <p>\n <code>InstanceID</code>\n </p>\n </li>\n <li>\n
<p>\n <code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter:</p>\n <ul>\n
<li>\n <p>\n <code>contains</code>\n </p>\n </li>\n <li>\n
<p>\n <code>equals</code>\n </p>\n </li>\n <li>\n
<p>\n <code>Notequal</code>\n </p>\n </li>\n </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
      "type": "structure",
      "members": {
        "Instances": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
```

```
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
```

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

```
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
             "traits": {
               "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
               "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
               "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
               "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
```

```
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
```

access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {

```
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
              },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
            }
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            },
            "smithy.api#uniqueItems": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
    },
    "value": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the subscription.</p>"
        }
      },
      "Type": {
        "target": "smithy.api#String",
        "traits": {

   "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
        }
      },
      "InstanceCount": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
    "type": "list",

   "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
    }
  },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

  "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
```

```
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/UpdateServiceSettings"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required":
{}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
```

```
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
                }
             }
          }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
             "message": {
                "target": "smithy.api#String"
             }
          },
          "traits": {
             "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
             "smithy.api#error": "client"
          }
       }
    }
}
```


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AssociateLicense
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InterceptAfterSerialization
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AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.90 github.com/aws/aws-sdk-go-v2/service/sso 1.29.1

1.90.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
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legacyEndpointContextSetter
SetLogger
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spanInitializeEnd
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spanBuildRequestStart
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ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

```
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
```

```
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
```

```
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
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  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning

Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
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CloseResponseBody
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RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
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RequestResponseLogger
InterceptTransmit
CheckoutLicense
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
```

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about an Active Directory identity provider. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The domain name for the Active Directory. "
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {

```
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
```

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license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

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            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

        }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
              }
            },
            "InstanceUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

      "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
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            "Attribute": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
               }
            },
            "Operation": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
               }
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
```

```
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
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            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
              }
            }
          },
```

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        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
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```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "AssociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
              }
            },
            "DisassociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
```

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
```

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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
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            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
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```
            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
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            "argv": [
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                "ref": "Endpoint"
              }
            ]
          }
        ],
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            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseFIPS"
                  },
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                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
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          {
            "conditions": [
              {

                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
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            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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          {
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                  },

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                "type": "endpoint"
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            "type": "tree"
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                "argv": [
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                    "ref": "Region"
                  }
                ]
              }
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                "conditions": [
                  {
                    "fn": "aws.partition",

                   "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
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                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

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true
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              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
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                "conditions": [
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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
```

```
                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "type": "tree"
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            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
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        "type": "tree"
    },
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        "conditions": [
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                "fn": "booleanEquals",
                "argv": [

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                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
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                        "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                ]
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        ]
    }
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        "conditions": [],
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
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            "headers": {}
        },
        "type": "endpoint"
    }
],
"type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"

}
    ],
    "type": "tree"
},
{
    "conditions": [
        {
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            "argv": [
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                    "ref": "UseDualStack"
                },
                true
            ]
        }
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```
                {

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                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
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                      "type": "endpoint"
                    }

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                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
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              "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                "type": "tree"
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      },
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        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
      }
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  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect":
{
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",

    "UseFIPS": true,
          "UseDualStack": false
        }
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      "expect": {
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        }
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
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    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
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```
        }
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      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
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    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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        }
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      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
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      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
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      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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    },
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                    }
                  },
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                    "UseFIPS": true,
                    "UseDualStack": false
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                    }
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                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
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                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                  },
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      "params": {
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        "UseFIPS": true,
        "UseDualStack": false
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      "expect": {
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        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
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          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
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                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
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                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
```

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        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
```

```
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
```

```
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
               }
            },
            "NextToken":
 {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
               }
            },
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n       </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to register.</p>",
                "smithy.api#required": {}
            }
        },

    "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
```

```
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
```

```
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
       "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
```

```
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
```

```
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
```

```
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
```

```
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
```

```
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
```

InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
```

```
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

        "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
```

```
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
```

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
```

```
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
```

```
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
      },
      {
        "conditions": [],
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {

            "fn": "aws.partition",
                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                       "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
```

```
                                        "ref": "PartitionResult"

                                },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [

                                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],

    "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],

                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {

      "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

            "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [
                      {
                        "conditions": [],
```

```
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

```
                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
```

```
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
```

```
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                      }
                     },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {

 "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
          },
          "params": {
            "Region": "us-isob-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },

    {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {

      "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
```

```
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",

                "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional
  objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
```

```
"<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
```

```
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"

              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

     "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
 return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
 nextToken from a previously truncated response.</p>"
              }
            }
          },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "EQUAL",
                "value": "Equal",
```

```
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
```

```
          "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
      "type": "list",
      "member": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
               },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
    },
    "value": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the subscription.</p>"
        }
      },
      "Type": {
        "target": "smithy.api#String",
        "traits": {

      "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
        }
```

```
            },
            "InstanceCount": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
         "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "RedHat",
                  "value": "RedHat",
                  "documentation": "RedHat subscription provider namespace"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
```

```
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
```

```
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
```

```
Region.</p>"
                }
            }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
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spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
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InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
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RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization

OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
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Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.91 mime-type 1.4.10

1.91.1 Available under license :

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1.92 aws-sdk-go-v2-service-ssooidc 1.34.2

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme

```
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
```

```
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
```

```
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
```

CheckoutBorrowLicense
Initialize stack step
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InterceptAfterSigning
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InterceptBeforeDeserialization

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ClientRequestID
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ResolveAuthScheme
GetIdentity
ResolveEndpointV2
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setLegacyContextSigningOptions
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RequestResponseLogger
InterceptTransmit
CheckoutLicense
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InterceptExecution
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legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
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InterceptBeforeSerialization
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Build stack step
ClientRequestID
ComputeContentLength
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GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

```
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
```

```
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
}
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
        "type": "structure",
        "members": {
           "message": {
              "target": "smithy.api#String"
           }
        },
        "traits": {
           "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
```

```
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
```

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                "smithy.api#length": {
                  "min": 1,
                  "max": 2
                }
              }
            },
            "DomainCredentialsProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
```

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            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
```

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    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
           },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
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            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
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            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
          "type": "structure",
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        "members": {
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
           "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
         "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
```

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            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
```

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            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
         "type": "structure",
         "members": {
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
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            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

  "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
               "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
               "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
               "smithy.api#required": {}
            }
          },
           "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
               "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
               "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
               "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The status of the
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identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
```

```
    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
```

```
        "arnNamespace": "license-manager-user-subscriptions",
        "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-user-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id",
          "content-length",

      "x-api-key",
          "authorization",
          "x-amz-date",
          "x-amz-security-token",
          "Access-Control-Allow-Headers",
          "Access-Control-Allow-Methods",
          "Access-Control-Allow-Origin"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
      },
      "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
      "smithy.api#title": "AWS License Manager User Subscriptions",
      "smithy.rules#endpointRuleSet": {
        "version": "1.0",
        "parameters": {
          "Region":
{
            "builtIn": "AWS::Region",
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
```

```
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
```

```
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",
```

```
                "argv": [
                    {
                        "ref": "Region"
                    }
                ],
                "assign": "PartitionResult"
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
```

true

```
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
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"fn": "booleanEquals",

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                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
```

```
                ]
            },

            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }

            ]
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
```

```
                "argv": [

{
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [

          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

      "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
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```
}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
```

```
                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
```

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                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

        "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
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```
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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```
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
```

```
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
```

```
"Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
```

```
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
```

```
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
         },
         {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
         },
         {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
         },
         {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
         },
         {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
         },
         {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
         }
      ]
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
   "type": "string",
    "traits": {
      "smithy.api#enum": [
         {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
         },
         {
```

```
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n<li>\n<p>Product</p>\n</li>\n<li>\n<p>DirectoryId</p>\n</li>\n</ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
```

```
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
               "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
```

```
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {

    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
```

```
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListUserAssociations"
       },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "InstanceUserSummaries"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
```

```
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
```

```
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {

           "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
```

```
        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
```

```
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },

          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
```

provider. \n   <note>\n
  Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n   </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The user name
 from the identity provider of the user. ",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": " An object that specifies details for the identity provider. ",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n   ",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
              }

```
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
      "smithy.api#http": {
        "method": "PUT",
        "uri": "/tags/{ResourceArn}"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
```

```
            },
            "TagKeys": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                   "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
 {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash

```
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
```

```
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
```

```
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
```

```
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
```

```
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
```

```
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
```

Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

      {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
         "type": "structure",
         "members": {
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
         "type": "structure",
```

```
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>The instance type of the resource.</p>"
               }
            },
            "AccountID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
          }
        },
        "SubscriptionProviderCreateTime": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
```

```
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
```

```
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                                ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "isSet",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

                "fn": "aws.partition",
                                        "argv": [
                                            {
                                                "ref": "Region"
```

```
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

},
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
```

```
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [

                                                     {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],

        "rules": [
                                                {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],

                                "type": "tree"
                                        }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
```

```
                                {

                "conditions": [
                                        {
                                           "fn": "booleanEquals",
                                           "argv": [
                                              {
                                                 "ref": "UseFIPS"
                                              },
                                              true
                                           ]
                                        }
                                     ],
                                     "rules": [
                                        {
                                           "conditions": [
                                              {

                              "fn": "booleanEquals",
                                                 "argv": [
                                                    {
                                                       "fn": "getAttr",
                                                       "argv": [
                                                          {
                                                             "ref": "PartitionResult"
                                                          },
                                                          "supportsFIPS"
                                                       ]
                                                    },
                                                    true

                                               ]
                                                 }
                                              ],
                                              "rules": [
                                                 {
                                                    "conditions": [],
                                                    "rules": [
                                                       {
                                                          "conditions": [],
                                                          "endpoint": {
                                                             "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                             "headers": {}
                                                          },
                                                          "type": "endpoint"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
but this partition does not support FIPS",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true

      ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {

                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }
                  ]
                }
```

```
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [

        {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          }
        ],
```

```
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
```

```
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },

    {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "Missing region",

              "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
```

```
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
```

```
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
```

```
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n        <p>The valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
      length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
```

```
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
```

```
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

"name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
```

```
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
 Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
             },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
```

```
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
```

```
                "value": "INVALID",
                "documentation": "INVALID status"
              },
              {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
```

```
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
```

```
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
```

```
    "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
 {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
```

```
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }

          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
```

```
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
             }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
```

```
            "smithy.api#error": "client"
          }
        }
      }
    }
}
```


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file or class name and description of purpose be included on the
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limitations under the License.
AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.93 github.com/aws/aws-sdk-go-v2/service/dynamodb 1.50.1

1.93.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
```

```
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
```

```
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
```

```
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

```
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
```

```
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
             }
         },
         "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
```

```
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider":
 {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
```

```
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
```

```
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

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            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

         "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
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    },
    {
      "conditions": [
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          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
```

true

```
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

 "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

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                ],
                "rules": [
                  {
                    "conditions": [],
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                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
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              {
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                "type": "error"

}
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
```

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                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]

        }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
  }
],
"type": "tree"
```

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            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
```

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            "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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{
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
```

```
            "UseDualStack": false
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        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
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            }
          },
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            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
          },
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            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
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```
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

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            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
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            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
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            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
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            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
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            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Product</p>\n          </li>\n          <li>\n            <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
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                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"


        }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
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            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
```

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
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        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

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            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
```

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                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http":
{
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
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            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
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        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
```

```
            },
            "UpdateSettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
{}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
```

```
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
```

```
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
```

```
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
```

```
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
```

```
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
```

```
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
```

```
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
```

```
nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
               "smithy.api#required": {}
             }
           }
         },
         "traits": {
           "smithy.api#input": {}
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
         "type": "structure",
         "members": {},
         "traits": {
           "smithy.api#output": {}
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
         "type": "structure",
         "members": {
           "Name": {
             "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The type of name to filter by.</p>"
              }
           },
           "Values": {
             "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
             }
           },
           "Operator": {
             "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
             "traits": {
               "smithy.api#documentation": "<p>An operator for filtering results.</p>"
             }
           }
         },
         "traits": {
           "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
         "type":
```

```
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

```
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
          "type": "structure",
          "members": {
            "AmiId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
              }
            },
            "InstanceID": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
```

```
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
```

```
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

```
                        true
                    ]
                }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
```

```
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {

"fn": "aws.partition",
              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
```

```
],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [

                             {
                                "ref": "PartitionResult"
                              },
                              "supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [],

    "rules": [
                          {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                              "properties": {},
```

```
                "headers": {}
              },
              "type": "endpoint"
            }
          ],

      "type": "tree"
          }
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        "type": "tree"
      },
      {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
        "type": "error"
      }
    ],
    "type": "tree"
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  {

"conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {

"fn": "booleanEquals",
            "argv": [
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
```

```
                    },
                    true

                ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled
but this partition does not support FIPS",
        "type": "error"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true

    ]
    }
```

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                ],
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                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [

        {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"

                    }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
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                                ],
                                "type": "tree"
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                            {
                                "conditions": [],
                                "rules": [
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                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            },
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                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
```

```
        }
      },
      {

  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

       },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
```

```
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },

    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
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```
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
            <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
                <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
         "members": {
            "Instances": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n         <p>The valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n                  <code>contains</code>\n               </p>\n            </li>\n            <li>\n               <p>\n                  <code>equals</code>\n               </p>\n            </li>\n            <li>\n               <p>\n                  <code>Notequal</code>\n               </p>\n            </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
```

```
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
              "traits": {
                "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

             }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
              }
            }
          },
```

```
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
             },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
         },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
```

```
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n       Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n       Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

       "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
"list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

  "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input":
 {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {

 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required":
{}
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
              }
            }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }
```

```
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
         }
      }
   }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step

spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

InterceptTransmit

1.94 github.com/aws/aws-sdk-go-v2/service/ssooidc 1.34.2

1.94.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step

```
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
```

```
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
```

```
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
}
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
```

```
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n             <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
```

```
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                  "smithy.api#required": {}
               }
            },
             "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                  "smithy.api#required": {}
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
               }
            }
         },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
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```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

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            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
```

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            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
         "type": "structure",
         "members": {
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                  "smithy.api#length": {
                     "min": 1
                  },
```

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    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
```

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            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
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                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
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  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
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        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
```

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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
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        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

          "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
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```
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
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                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
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                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

true

```
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
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"fn": "booleanEquals",

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                            "argv": [
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                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
```

```
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

 {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
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                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [

        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

    "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
```

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                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

        "conditions": [
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]

        }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }

            ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "DualStack is enabled but this partition does not support DualStack",
```

```
                                "type": "error"
                            }
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                        "type": "tree"
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                    {
                        "conditions": [],
                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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```
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

      "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
```

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            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
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          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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```
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
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        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
```

```
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
```

```
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
             "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
```

```
            }
          },
          "NextToken":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/ListLicenseServerEndpoints"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "LicenseServerEndpoints"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
      "type": "structure",
      "members": {
```

```
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListProductSubscriptions"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
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```
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

     "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
          },
          "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
```

```
 "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
```

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            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
```

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {

      "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },
```

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        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
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            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
             "traits": {
               "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
               "smithy.api#required": {}
             }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
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```
                "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
```

```
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
```

```
        }
      }
    }
  }
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
```

```
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
```

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
```

```
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
```

```
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
```

```
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.
    KeyFingerprint *string

    // Product SKU.
    //
    // This member is required.
    ProductSKU *string

    // License beneficiary.
    Beneficiary *string

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the checkout license.
```

```
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
```

```
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
```

```
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
```

```
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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```
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 OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string
```

```
 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
              }
            },
            "Operator": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
              "traits": {
                "smithy.api#documentation": "<p>An operator for filtering results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
          "type":
 "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
          },
          "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
```

```
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
          "type": "structure",
          "members": {}
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
```

```
            "target": "smithy.api#String",

    "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
```

```
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
```

```
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

```
                "argv": [
                  {

                "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"

},
                              "supportsFIPS"
                          ]
                        }
                      ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [

                       {
                            "ref": "PartitionResult"
```

```
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

                "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled
```

```
but this partition does not support FIPS",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true

                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "rules": [

        {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
```

```
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"

                            }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
```

```
        ],
        "type": "tree"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
```

```
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

        },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
```

```
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }

   },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
```

```
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }

                },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
                    }
                  },
```

```
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
```

```
        {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {

           "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",

              "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
```

\n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation":
"NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
```

```
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
```

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

   "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
             "traits": {
               "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
               "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
               "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
               "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
```

```
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
```

access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {

```
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
              },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
            }
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            },
            "smithy.api#uniqueItems": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
    },
    "value": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the subscription.</p>"
        }
      },
      "Type": {
        "target": "smithy.api#String",
        "traits": {

   "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
        }
      },
      "InstanceCount": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
    "type": "list",

   "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
    }
  },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

  "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
```

```
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/UpdateServiceSettings"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required":
{}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
```

settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
                }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
          "traits": {
              "smithy.api#documentation": " The provided input is not valid. Try your request again. ",
              "smithy.api#error": "client"
          }
      }
  }
}

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.95 github.com/aws/aws-sdk-go-v2/feature/ec2/imds 1.18.6

1.95.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

```
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
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 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer
```

```
// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
```

```
 ServiceID:     ServiceID,
 OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
   matrix:
    python-version: [3.9]

  steps:
   - name: Checkout target
    uses: actions/checkout@v2
    with:
     path: sdkbase
     ref: ${{ github.base_ref }}
   - name: Checkout this ref
    uses: actions/checkout@v2
    with:
     path: new-ref
     fetch-depth: 0
   - name: Get Diff
    run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
   - name: Get Target Files
    run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
   - name: Checkout scancode
    uses: actions/checkout@v2
    with:
     repository: nexB/scancode-toolkit
     path: scancode-toolkit
     fetch-depth: 1
   - name: Set up Python ${{ matrix.python-version }}
     uses: actions/setup-python@v2
    with:
     python-version: ${{ matrix.python-version }}
   # ScanCode
   - name: Self-configure scancode
    working-directory: ./scancode-toolkit
    run: ./scancode --help
   - name: Run Scan code on target
    run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
```

toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning

Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
  - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
          "DirectoryId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
              }
            },
            "DomainIpv4List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 2
                }
              }
            },
            "DomainCredentialsProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
```

```
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
```

status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "

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            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
```

```
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

         {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
             "traits": {
               "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
               "smithy.api#required": {}
             }
           },
           "Tags": {
             "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
               "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
             }
           }
         },
         "traits": {
           "smithy.api#input": {}
         }
       },
       "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
         "type": "structure",
         "members": {
           "IdentityProviderArn": {
             "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
             }
           },
           "LicenseServerEndpointArn": {
             "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
               "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
             }
           }
         },
         "traits": {
           "smithy.api#output": {}
         }
       },
       "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
         "type": "union",
         "members": {
           "SecretsManagerCredentialsProvider": {
             "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
```

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            "uri": "/license-server/DeleteLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
           "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
         "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
```

```
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
```

```
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
```

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\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
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                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
            }
        },
        "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
            }
        },
        "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
```

```
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
```

```
    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
  },
  {
```

```
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
          ],
          "traits": {
            "aws.api#service": {
              "sdkId": "License Manager User Subscriptions",
              "arnNamespace": "license-manager-user-subscriptions",
              "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
              "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
              "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id",
                "content-length",

           "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
              ],
              "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
              ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region":
{
                  "builtIn": "AWS::Region",
                  "required": false,
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            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

```
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
```

```
                ],
                "rules": [
                    {
                        "conditions": [
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                                "fn": "aws.partition",

                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseFIPS"
                                            },

true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {

"fn": "booleanEquals",
                                                "argv": [
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                                                    {
                                                        "fn": "getAttr",
```

```
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },

                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
```

```
                ],
                "type": "tree"
              },
              {
                "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [

{
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [

                {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {

          "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
```

```
                "type": "tree"
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              {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

    "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]

    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
```

```
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                        ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
```

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{
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",

    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint":
{
                        "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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        }
      },
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        "UseFIPS": false,
```

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        "UseDualStack": true
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    },
    {
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      "expect": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
```

```
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
      "type": "structure",
      "members": {
        "ProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
          "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
```

```
{
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
              }
            },
            "LicenseServerEndpointId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
              }
            },
            "LicenseServerEndpointProvisioningStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
              }
            },
            "LicenseServers": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
              }
            },
            "CreationTime": {
              "target": "smithy.api#Timestamp",
              "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
          "type": "string"
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
         },
         {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
         },
         {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
         },
         {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
         },
         {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
         },
         {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
         }
      ]
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
   "type": "string",
```

```
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                    "smithy.api#required": {}
                }
            },
             "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
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                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n            <li>\n                <p>InstanceId</p>\n
</li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
```

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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
{}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints </p>",
            "smithy.api#http": {
               "code": 200,
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            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
             "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
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            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
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            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
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        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
```

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        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
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            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

      }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
```

```
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
          }
        },
        "NextToken": {
          "target":
 "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {

         "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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```
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
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user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
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            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
         }
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    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",

      "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

     "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
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        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
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            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
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            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
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            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
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                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
             }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
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{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
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            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

       "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
 {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
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            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
            }
          },
          "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
{}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
    }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

```
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {
```

```
 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
```

```
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
```

```
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}
```

```
type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string
```

```
 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
```

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

        {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                 "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {},
          "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
```

```
            },
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
                  "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }
        },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
        },
        "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
```

```
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your
```

```
instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
```

```
        "aws.api#service": {
          "sdkId": "License Manager Linux Subscriptions",
           "arnNamespace": "license-manager-linux-subscriptions",
          "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
```

```
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
```

```
                "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {

                          "ref": "UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }

],
                        "rules": [
                          {
                            "conditions": [
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"

                },
                                          "supportsFIPS"
```

```
                ]
              }
            ]
          },
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",
                "argv": [

                 {
                      "ref": "PartitionResult"
                  },
                  "supportsDualStack"
                ]
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [],

    "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],

            "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
              "type": "error"
```

```
                }
            ],
            "type": "tree"
        },
        {

    "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

                "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
```

```
    "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true


                ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {

                                                "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
```

```
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [

        {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"

                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
```

```
                        ],
                        "type": "tree"
                      }
                    ],
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
```

```
                {

              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                    }

            },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {

             "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
```

```
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
```

```
                {
                  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                    }

                 },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
```

```
    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },

        {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {

          "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
```

```
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",

                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
          <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
```

```
"NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n          <p>The valid names for this filter are:</p>\n          <ul>\n              <li>\n                <p>\n                  <code>Subscription</code>\n                </p>\n              </li>\n          </ul>\n          <p>The valid Operators for this filter are:</p>\n          <ul>\n              <li>\n                <p>\n                  <code>contains</code>\n                </p>\n              </li>\n              <li>\n                <p>\n                  <code>equals</code>\n                </p>\n              </li>\n              <li>\n                <p>\n                  <code>Notequal</code>\n                </p>\n              </li>\n          </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
```

```
        "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"

                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
```

```
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

     "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
        "smithy.api#http": {
          "method": "GET",
```

```
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
```

```
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {

          "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
```

Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":

```
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
```

```
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

       "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with
Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace.
Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing
from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
```

```
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
```

```
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
```

```
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
         "type": "structure",
         "members": {
            "LinuxSubscriptionsDiscovery": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
               "traits": {
                  "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                  "smithy.api#required":
{}
               }
            },
            "LinuxSubscriptionsDiscoverySettings": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
               "traits": {
                  "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                  "smithy.api#required": {}
               }
            },
            "AllowUpdate": {
               "target": "smithy.api#Boolean",
               "traits": {
                  "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
               }
            }
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
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RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
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spanBuildRequestEnd
Finalize stack step
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ResolveAuthScheme
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setLegacyContextSigningOptions
InterceptBeforeSigning
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InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.96 aws-sdk-go-v2-service-s3 1.87.3

1.96.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd

Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
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Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
```

```
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
```

```
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
```

Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
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RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

UserAgent
AddTimeOffsetMiddleware
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spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
```

```
        "type": "structure",
        "members": {
          "DirectoryId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
```

```
            }
          },
          "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
```

```
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
    "type": "structure",
    "members": {
      "Username": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
          "smithy.api#required": {}
        }
      },
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>The identity provider for the user.</p>",
          "smithy.api#required": {}
        }
      },
      "Domain": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
        }
      },
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
        }
      }
    },
    "traits": {

  "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
    "type": "structure",
    "members": {
      "InstanceUserSummary": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                  "smithy.api#required": {}
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
```

<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

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            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
```

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            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
```

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                "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
              }
            },
            "InstanceUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
```

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                    "min": 1
                },

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
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        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

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            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
               }
            },
            "FailureMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
         "type": "list",
         "member": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                  "smithy.api#required": {}
               }
            },
            "Products": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                  "smithy.api#required": {}
               }
```

```
            },
            "LastStatusCheckDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date of the last status check.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
```

```
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                 }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
   "type": "structure",
   "members": {
      "message": {
         "target": "smithy.api#String"
      }
   },
   "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
   "type": "string",
   "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
   "type": "service",
   "version": "2018-05-10",
   "operations": [
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
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            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

        "x-api-key",
              "authorization",
              "x-amz-date",
              "x-amz-security-token",
              "Access-Control-Allow-Headers",
              "Access-Control-Allow-Methods",
              "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region":
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
              },
```

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      "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
        "type": "Boolean"
      },
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
         ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [
              {
```

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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },

"properties": {},
                        "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
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                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
```

```
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

true

```
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
```

"fn": "booleanEquals",

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                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          }
                        ]
                      },
```

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                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

                ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

    ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
```

```
{
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

  }
                    ],
```

```
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

         }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
```

```
                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

      "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
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```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
```

```
                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack":
 false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error":
```

```
"Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
```

```
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
```

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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
         },
         {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
         },
         {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
         },
         {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
         },
         {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
         },
         {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
         }
      ]
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
   "type": "string",
    "traits": {
      "smithy.api#enum": [
         {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
         },
         {
```

```
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n<li>\n<p>Product</p>\n</li>\n<li>\n<p>DirectoryId</p>\n</li>\n</ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
```

```
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n            <li>\n                <p>InstanceId</p>\n
</li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
               "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
```

```
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {

    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
```

```
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/ListUserAssociations"
         },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceUserSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
      "type": "structure",
```

```
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
```

```
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {

           "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
              "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
              },
              "smithy.api#idempotent": {}
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
            "type": "structure",
            "members": {
              "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                  "smithy.api#required": {}
                }
              },

           "Product": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                  "smithy.api#required": {}
                }
              },
              "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
              },
              "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
                }
              }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
```

```
        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
```

```
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },

          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
```

provider. \n <note>\n
Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name
from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}

```
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
      "smithy.api#http": {
        "method": "PUT",
        "uri": "/tags/{ResourceArn}"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
      "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
```

```
            },
            "TagKeys": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                   "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
 {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A parameter is not valid.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - ProductSKU
//
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
```

```
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
```

```
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
```

```
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
```

```
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
```

```
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

```
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
```

```
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

            ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
```

```
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }

  ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
                      "rules": [
                        {
                          "conditions": [],
```

```
      "rules": [
                                        {
                                          "conditions": [],
                                          "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }
                                      ],

                            "type": "tree"
                                    }
                                  ],
                                  "type": "tree"
                                },
                                {
                                  "conditions": [],
                                  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                  "type": "error"
                                }
                              ],
                              "type": "tree"
                            },
                            {

          "conditions": [
                                {
                                  "fn": "booleanEquals",
                                  "argv": [
                                    {
                                      "ref": "UseFIPS"
                                    },
                                    true
                                  ]
                                }
                              ],
                              "rules": [
                                {
                                  "conditions": [
                                    {

                        "fn": "booleanEquals",
                                        "argv": [
                                          {
```

```
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
 but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
```

```
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true

                            ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                        "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "rules": [

        {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],
                                            "type": "tree"

                                }
                                    ],
```

```
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
           },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
```

```
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
```

```
                    "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },

        {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
```

```
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
```

```
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Instances"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
 <li>\n              <p>\n                <code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n
  <p>\n                <code>InstanceType</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
    <code>ProductCode</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>Region</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>Status</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>UsageOperation</code>\n              </p>\n            </li>\n          </ul>\n          <p>For each filter, you can use
 one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n          <ul>\n
    <li>\n              <p>\n                <code>contains</code>\n              </p>\n            </li>\n            <li>\n
 <p>\n                <code>equals</code>\n              </p>\n            </li>\n            <li>\n
```

```
            <p>\n                <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
```

```
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n
```

```
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "RegisteredSubscriptionProviders"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
```

```
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
```

```
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {
```

```
    "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
             "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
             "smithy.api#required": {}
           }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
             "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
             "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
              }
            },
            "SubscriptionProviderStatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
              }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "InProgress",
```

```
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
"list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                 "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

   "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
            "smithy.api#input":
{}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
        }

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
          "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
        }

  },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
           }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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1.97 aws-sdk-go-v2-credentials 1.18.10

1.97.1 Available under license :

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  setLegacyContextSigningOptions
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  Signing
  InterceptAfterSigning
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  CloseResponseBody
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  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
```

```
        with:
          repository: nexB/scancode-toolkit
          path: scancode-toolkit
          fetch-depth: 1
      - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
```

```
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
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ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
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InterceptAttempt
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GetIdentity
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setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

ListReceivedLicenses
Initialize stack step
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Signing
InterceptAfterSigning
Deserialize stack step
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever

```
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
```

```
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
             }
         },
         "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
```

```
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
```

```
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
```

```
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
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    {
      "conditions": [
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          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },

true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

 "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
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```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
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                "fn": "booleanEquals",
                "argv": [

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                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

{
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

      "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              },
              {
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                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
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  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
```

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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
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                "type": "tree"
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            {
                "conditions": [],
                "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

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            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
```

```
            "UseDualStack": true
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        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
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        "endpoint":
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          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
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```

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            "UseDualStack": false
          }
        },
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          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
```

```
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

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            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
```

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                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
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            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
```

```
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Product</p>\n          </li>\n          <li>\n            <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "LicenseServerEndpoints"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
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                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
 "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for this product
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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
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            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
```

```
        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http":
{
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
```

```
        },
        "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
    <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
```

```
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - Beneficiary
//
//   - ProductSKU
//
//   - Fingerprint
//
//   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
```

```
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}
```

```
type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options)) (*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}
```

```
type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
```

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
```

```
    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
```

```
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
```

```
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
```

```
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
```

```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {

    "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
```

```
                                        "argv": [

                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
```

```
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

                    "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            },
                                            true

                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"
                                    }
                                ],
                                "type": "tree"
```

```
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true

          ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {

                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
```

```
        {
                                                "conditions": [],
                                                "endpoint": {
                                                   "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                   "properties": {},
                                                   "headers": {}
                                                },
                                                "type": "endpoint"
                                             }
                                          ],
                                          "type": "tree"

                                    }
                                       ],
                                       "type": "tree"
                                    },
                                    {
                                       "conditions": [],
                                       "error": "DualStack is enabled but this partition does not support DualStack",
                                       "type": "error"
                                    }
                                 ],
                                 "type": "tree"
                              },
                              {
                                 "conditions": [],
                                 "rules": [
                                    {
                                       "conditions": [],
                                       "endpoint": {
                                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                          "properties": {},
                                          "headers": {}
                                       },
                                       "type": "endpoint"
                                    }
                                 ],
                                 "type": "tree"
                              }
                           ],
                           "type": "tree"
                        }
                     ],
                     "type": "tree"
                  },
                  {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
```

```
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },

    {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
```

```
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
                }
            ],
            "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
```

```
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
 objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                  }
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
            "type": "structure",
            "members": {
              "Subscriptions": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
```

```
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
```

```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
```

```
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

"name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {

                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
```

```
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
```

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
```

```
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with
Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace.
Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing
from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
```

```
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

   "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
{}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
              }

    },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
              }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
  }
```

}

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.98 aws-sdk-go-v2-service-internal-presigned-url 1.13.6

1.98.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer

```
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
```

```
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus
```

```
// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
```

```
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
```

```
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
 OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
          }
        },
        "DomainIpv4List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 2
            }
          }
        },
        "DomainCredentialsProvider": {
          "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
          }
        },
        "DomainNetworkSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
```

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                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
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information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
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        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
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<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": " The tags that apply for the license server endpoint. "
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }

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    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
      "type": "union",
      "members": {
        "SecretsManagerCredentialsProvider":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

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}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
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            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
         "type": "string",
         "traits": {
```

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            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
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        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
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                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

    "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
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{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
```

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endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
```

```
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

  "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
```

```
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
```

```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }
                  ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [
                    {

                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "endpoint": {
                    "url": {
                      "ref": "Endpoint"
                    },

 "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
```

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
                            },

true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "rules": [
                          {
```

```
                "conditions": [
                    {

  "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

            ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
```

```
    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

{
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
```

```
                "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"

}
    ],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "rules": [
        {

    "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
```

```
}
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

                            ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                    "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
```

```
                "type": "error"
              }
            ]
          },
          "smithy.rules#endpointTests": {
            "testCases": [
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",

      "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
```

```
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
```

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      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
```

```
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
```

```
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                      "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
      "type": "structure",
      "members": {
        "ProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
          "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
          }
        },
        "HealthStatus": {
          "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
          "traits": {
            "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
          }
        },
        "Ipv4Address": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>"
          }
        },
        "ServerEndpoint": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
```

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            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
          "type": "string"
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
              },
              {
                "name": "PROVISIONING_FAILED",

               "value": "PROVISIONING_FAILED",
                "documentation": ""
              },
              {
                "name": "PROVISIONED",
                "value": "PROVISIONED",
                "documentation": ""
              },
              {
                "name": "DELETING",
                "value": "DELETING",
                "documentation": ""
              },
              {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""
              },
              {
                "name": "DELETED",
```

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            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
```

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for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
```

```
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "IdentityProviderSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>Product</p>\n            </li>\n            <li>\n               <p>DirectoryId</p>\n
</li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
```

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                "smithy.api#required": {}
              }
            },
             "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
```

```
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "NextToken":
 {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>Status</p>\n            </li>\n            <li>\n               <p>InstanceId</p>\n
</li>\n         </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
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```
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
             "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
```

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        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n<li>\n<p>Status</p>\n</li>\n<li>\n<p>Username</p>\n</li>\n<li>\n<p>Domain</p>\n</li>\n</ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

   "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
      "smithy.api#http": {
        "method": "GET",
        "uri": "/tags/{ResourceArn}"
       },
      "smithy.api#readonly": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
          "smithy.api#httpLabel": {},
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
```

```
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
            },
```

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            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {
```

```
        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
```

```
  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
   <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
```

```
            "target": "smithy.api#String"
          },
          "value": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{ResourceArn}"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
    },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
         "type": "structure",
          "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings":
 {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
```

```
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                "smithy.api#required":
{}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
```

```
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
```

```
 params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
```

```
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
 Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
```

```
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
```

```
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
```

```
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string
```

```
 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
```

```
//
// Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
// trials.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
 OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
```

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
```

```
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
            "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetRegisteredSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
```

```
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
          }
        },
        "InstanceID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
          }
        },
        "InstanceType": {
```

```
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
```

```
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
```

```
        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                       "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

    ],
                    "rules": [
                      {
                        "conditions": [
```

```
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [
                                                {
                                                  "ref": "PartitionResult"

                    },
                                                "supportsFIPS"
                                              ]
                                            }
                                          ]
                                        },
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [

                                               {
                                                  "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                              ]
                                            }
                                          ]
                                        }
                                      ],
                                      "rules": [
                                        {
                                          "conditions": [],

        "rules": [
                                            {
                                              "conditions": [],
                                              "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                              },
                                              "type": "endpoint"
                                            }
```

```
                                    ],

                                "type": "tree"
                                        }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {

                "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {

                            "fn": "booleanEquals",
                                            "argv": [
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsFIPS"
                                                    ]
                                                },
                                                true
```

```
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
 but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
                        {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {

                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [

        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"

                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
```

```
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
                }
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
```

```
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                      }

                   },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {

  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                      }
                    },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
```

```
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },

            {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
    disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
```

```
      "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "For custom endpoint with fips disabled and dualstack enabled",
               "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
               },
               "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "Missing region",

            "expect": {
                  "error": "Invalid Configuration: Missing Region"
               }
            }
         ],
         "version": "1.0"
      }
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
         },
         {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
         }
      ]
   }
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
```

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the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Instances"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n           <li>\n              <p>\n                 <code>AccountID</code>\n
</p>\n           </li>\n           <li>\n              <p>\n                 <code>AmiID</code>\n              </p>\n           </li>\n
        <li>\n              <p>\n                 <code>DualSubscription</code>\n              </p>\n           </li>\n
<li>\n              <p>\n                 <code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n
  <p>\n                 <code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
    <code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n              <p>\n                 <code>contains</code>\n              </p>\n           </li>\n           <li>\n
<p>\n                 <code>equals</code>\n              </p>\n           </li>\n           <li>\n
              <p>\n                 <code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
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```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
```

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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "Subscriptions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
         "type": "operation",
         "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
         },
         "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
         },
```

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        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
               }
            }
         },

         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
         "type": "structure",
         "members": {
            "RegisteredSubscriptionProviders": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
               "traits": {
                  "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
               "method": "GET",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
         "type": "structure",
         "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}

               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
         "type": "structure",
         "members": {
            "tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {

"name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled OrganizationIntegration"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
```

```
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
```

```
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
             "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
```

```
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
       },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
```

```
            "Type": {
              "target": "smithy.api#String",
              "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
              }
            },
            "InstanceCount": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
          "type": "list",

         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
```

```
        "type":
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                 "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key":
{
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
               "method": "DELETE",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
         "type": "structure",

    "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

```
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
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OperationInputValidation

spanInitializeEnd
Serialize stack step
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InterceptAfterSerialization
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RecursionDetection
spanBuildRequestEnd
Finalize stack step
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InterceptBeforeDeserialization
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RequestResponseLogger
InterceptTransmit
ListLicenses
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InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.99 github.com/aws/aws-sdk-go-v2/credentials 1.18.10

1.99.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
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OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
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InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
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ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

```
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
```

```
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
```

```
        with:
          path: sdkbase
          ref: ${{ github.base_ref }}
      - name: Checkout this ref
        uses: actions/checkout@v2
        with:
          path: new-ref
          fetch-depth: 0
      - name: Get Diff
        run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
      - name: Get Target Files
        run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
      - name: Checkout scancode
        uses: actions/checkout@v2
        with:
          repository: nexB/scancode-toolkit
          path: scancode-toolkit
          fetch-depth: 1
      - name: Set up Python ${{ matrix.python-version }}
         uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
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InterceptAfterSerialization
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AddTimeOffsetMiddleware
RecursionDetection
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GetIdentity
ResolveEndpointV2
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RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
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Build stack step
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Finalize stack step
spanRetryLoop
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InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
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setLegacyContextSigningOptions
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RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
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ClientRequestID
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
```

```
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
```

```
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n         <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
                }
            },
```

```
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

       {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
    "type": "union",
```

```
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoint": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
               "traits": {
                  "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
               }
            }
         },
          "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

    "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
```

```
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
    },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
    },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
   },
   {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
   },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

             "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
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                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
                    "type": "String"
                }
            },
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Endpoint"
                                }
                            ]
                        }
                     ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

```
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
```

```
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "aws.partition",

                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },

true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
```

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  "fn": "booleanEquals",
                                        "argv": [
                                          true,
                                          {
                                            "fn": "getAttr",
                                            "argv": [
                                              {
                                                "ref": "PartitionResult"
                                              },
                                              "supportsFIPS"
                                            ]
                                          }
                                        ]
                                      },

                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                          true,
                                          {
                                            "fn": "getAttr",
                                            "argv": [
                                              {
                                                "ref": "PartitionResult"
                                              },
                                              "supportsDualStack"
                                            ]
                                          }

                                ]
                                      }
                                    ],
                                    "rules": [
                                      {
                                        "conditions": [],
                                        "endpoint": {
                                          "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                          "properties": {},
                                          "headers": {}
                                        },
                                        "type": "endpoint"
                                      }

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                                    "type": "tree"
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                                  {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
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            "type": "tree"
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          {
            "conditions": [
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                "fn": "booleanEquals",
                "argv": [

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                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [

{
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
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                  {
                    "conditions": [],
                    "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
```

```
                                "headers": {}
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                            "type": "endpoint"
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                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
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                    {

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                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

    }
                            ]
                        }
```

```
                ],
                "rules": [
                    {
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                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
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        {
            "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
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        "type": "tree"
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
```

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        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
```

```
{
                    "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
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            "UseFIPS": false,
            "UseDualStack": true
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        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
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{
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            }
          },
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            "UseFIPS": true,
            "UseDualStack": false
          }
        },
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          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
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```
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          "Region": "us-gov-east-1",
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           "UseDualStack": true
        }
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      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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          }
        },
        "params": {
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          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
```

```
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
 false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
```

```
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                 }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
```

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            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
            },
            "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
```

\n\t\t\taddress of the RDS license server endpoint. "
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": " The ID of the license server endpoint. "
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
              "smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
            }
          }
        },
        "traits": {

```
            "smithy.api#documentation":
"<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",

                  "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
```

```
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                    "smithy.api#required": {}
                }
            },
```

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            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                 "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
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        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
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        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
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            "uri": "/user/ListUserAssociations"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
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                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
 "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {

           "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
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            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a product for this user.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductUserArn": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
          }
        },
        "SubscriptionStartDate": {
          "target": "smithy.api#String",
          "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
          }
        },
        "SubscriptionEndDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The end date of a subscription.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
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```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
```

```
      "traits": {
        "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 404
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",

      "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

     "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
```

```
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
```

<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
```

```
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
```

```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
             "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
            },
            "UpdateSettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n            <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
```

```
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                "smithy.api#required":
{}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

DeleteLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization

```
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
```

```
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

```
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:
      region,
 ServiceID:     ServiceID,
 OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string
```

```
// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData
```

```
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
```

```
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
```

```
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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```
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
```

```
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

        },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",
```

```
    "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
```

```
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
       "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
```

```
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                  },
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": {
                        "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
```

```
                "ref": "UseFIPS"
                    },
                    true
                ]
                },
                {
                "fn": "booleanEquals",
                "argv": [
                    {
                    "ref": "UseDualStack"
                    },
                    true
                ]
                }

    ],
                "rules": [
                {
                    "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                            {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                            ]
                        }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [

                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
```

```
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
```

```
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                    "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
 but this partition does not support FIPS",
                        "type": "error"
```

```
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

{
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
```

```
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
```

```
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                    }

            },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                    }
                 },
                "params": {
```

```
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
```

```
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
```

```
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                 "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

        "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "Missing region",

          "expect": {
              "error": "Invalid Configuration: Missing Region"
            }
          }
        ],
        "version": "1.0"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
```

\n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
objects. "
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
" Lists the Linux subscriptions that have been discovered. If you have linked your\n   organization, the returned results will include data aggregated across your accounts in\n   Organizations. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
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            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
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```
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
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the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
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        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
```

```
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

            "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
```

\n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-

```
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
```

```
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input":
 {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required":
{}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

from. "
            }

    },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
            }
        },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n   subscriptions. "
            }
         }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " The provided input is not valid. Try your request again. ",
        "smithy.api#error": "client"
      }
    }
  }
}

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AssociateLicense
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InterceptBeforeDeserialization
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RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.100 aws-sdk-go-v2-feature-s3-manager 1.19.4

1.100.1 Available under license :

GetLicense
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spanBuildRequestStart
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ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection

```
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
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 Retry
 InterceptAttempt
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 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer
```

```
// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
```

```
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
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  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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InterceptAfterSigning
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ComputePayloadHash
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ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
```

\n\t\t\taddresses, and the credential provider for user administration. "
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about an Active Directory identity provider. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The domain name for the Active Directory. "
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an

```
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
```

```
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

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        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
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            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
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information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

   "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
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        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
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            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
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user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
```

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        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
```

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            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
```

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      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [
            {

              "fn": "booleanEquals",
              "argv": [
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                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
        },
        {
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                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
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            ],
            "type": "tree"
          },
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            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",

                   "argv": [
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                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

```
true
                ]
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              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
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                "conditions": [
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"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
```

```
                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
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        "type": "tree"
    },
    {
        "conditions": [
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                "fn": "booleanEquals",
                "argv": [

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                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
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                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
```

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                                    "argv": [

                                {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
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                            {
                                "conditions": [],
                                "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

}
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
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```
                {

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                    {
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                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

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                    "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ],
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            },
            {
              "conditions": [],
              "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
                "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        }
      ],
      "type": "tree"
    },
    {
      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

    "UseFIPS": true,
        "UseDualStack": false
      }
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```
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
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        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
```

```
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
```

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        {
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              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
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            "UseFIPS": true,
            "UseDualStack": false
          }
        },
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          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
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        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
```

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      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
```

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      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
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```
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
```

```
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
```

```
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
```

```
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
                }
            },
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>Status</p>\n            </li>\n            <li>\n            <p>InstanceId</p>\n
</li>\n         </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

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            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
       }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
            }
        },

      "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
```

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            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                  "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                  "smithy.api#length": {
                    "min": 1
                  }
                }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
```

```
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
       "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
```

```
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
```

```
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
```

```
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
```

```
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
```

```
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
```

InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
```

```
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

        "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
```

```
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
```

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
```

```
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region": {
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
                     "type": "Boolean"
                },
```

```
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
      },
      {
        "conditions": [],
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {

            "fn": "aws.partition",
                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                       "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
```

```
                                        "ref": "PartitionResult"

                    },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                     {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {

      "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {

            "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          },
                          true

                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
```

```
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

```
                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
```

```
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ],
 "type": "tree"
 }
 ]
},
"smithy.rules#endpointTests": {
 "testCases": [
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

 }
   },
   "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
   }
  },
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
    }
   },
   "params": {
    "Region": "us-east-1",
```

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                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

    },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
```

```
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                      }
                     },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {

 "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
```

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            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
            },
            "params": {
              "Region": "us-isob-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },

    {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {

      "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
```

```
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",

                "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional
  objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
```

```
"<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
```

```
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"

              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
 return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
 nextToken from a previously truncated response.</p>"
              }
            }
          },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "EQUAL",
                "value": "Equal",
```

```
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
```

```
          "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
      "type": "list",
      "member": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
               },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
```

```
            },
            "InstanceCount": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
         "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "RedHat",
                  "value": "RedHat",
                  "documentation": "RedHat subscription provider namespace"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
```

```
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
```

```
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
```

```
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
             }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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limitations under the License.
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AddTimeOffsetMiddleware
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InterceptTransmit

1.101 github.com/aws/aws-sdk-go-v2/service/dynamodbstreams 1.30.2

1.101.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart

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OperationDeserializer
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AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
```

This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

```
 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
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  ComputeContentLength
  SetCredentialSourceMiddleware
```

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InterceptAttempt
RetryMetricsHeader
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InterceptBeforeDeserialization
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RequestResponseLogger
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
          "DirectoryId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
```

```
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n <note>\n <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n </note>",
        "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {
```

```
    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
```

```
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

```
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n          </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
              }
            },
            "InstanceUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
```

```
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
```

```
            },
            "Products": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                  "smithy.api#required": {}
               }
            },
            "LastStatusCheckDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date of the last status check.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
```

```
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
```

```
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

           "x-api-key",
              "authorization",
              "x-amz-date",
              "x-amz-security-token",
              "Access-Control-Allow-Headers",
              "Access-Control-Allow-Methods",
              "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region":
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
```

```
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [
              {

                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "endpoint": {
              "url": {
                "ref": "Endpoint"
              },

"properties": {},
                "headers": {}
            },
            "type": "endpoint"
          }
        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
```

```
                {
                  "fn": "aws.partition",

                 "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },

true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {

"fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
```

```
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }

            ]
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [

{
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [

                {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {

          "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
```

```
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

    }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]

         }
                                                ]
                                            }
                                        ],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
```

```
                                    },
                                    "type": "endpoint"
                                }

                            ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
```

```
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",

    "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
```

```
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
```

```
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
```

```
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                 }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
```

```
            },
            "LicenseServerEndpointId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
               }
            },
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
               }
            },
            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
               }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
               }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
```

```
      "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "PROVISIONING",
          "value": "PROVISIONING",
          "documentation": ""
        },
        {
          "name": "PROVISIONING_FAILED",

         "value": "PROVISIONING_FAILED",
          "documentation": ""
        },
        {
          "name": "PROVISIONED",
          "value": "PROVISIONED",
          "documentation": ""
        },
        {
          "name": "DELETING",
          "value": "DELETING",
          "documentation": ""
        },
        {
          "name": "DELETION_FAILED",
          "value": "DELETION_FAILED",
          "documentation": ""
        },
        {
          "name": "DELETED",
          "value": "DELETED",
          "documentation": ""
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
      "smithy.api#enum": [
        {
          "name": "HEALTHY",
          "value": "HEALTHY",
```

```
                "documentation": ""
              },
              {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
```

```
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n       </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                  "smithy.api#required": {}
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
```

empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",

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                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                 "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
```

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            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
```

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  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n            <li>\n               <p>Status</p>\n            </li>\n            <li>\n               <p>Username</p>\n            </li>\n            <li>\n               <p>Domain</p>\n            </li>\n         </ul>"
               }
```

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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
         "type": "structure",

       "members": {
            "ProductUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
           },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

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  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListUserAssociations"
       },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "InstanceUserSummaries"
      }
    }
  },
```

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    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
```

```
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

           "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
```

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            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
```

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      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
      "type": "structure",
      "members": {
        "RdsSalCredentialsProvider": {

      "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                  "smithy.api#required": {}
               }
            },

          "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                  "smithy.api#required": {}
               }
            },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
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```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
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```
            "target": "smithy.api#String",

        "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

       "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
```

```
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "RDS_SAL",
                  "value": "RDS_SAL",
                  "documentation": ""
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
            "type": "structure",
            "members": {
              "message": {
                "target": "smithy.api#String"
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
              "smithy.api#error": "client"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#Settings": {

        "type": "structure",
            "members": {
              "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                  "smithy.api#length": {
                    "min": 1
                  },
                  "smithy.api#required": {}
                }
              },
              "SecurityGroupId": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
```

```
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
```

```
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
               }
             }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
         "type": "list",
         "member": {
            "target": "smithy.api#String"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
         }
      },
```

```
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
```

```
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
              }
            },
            "UpdateSettings":
 {
              "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
              "traits": {
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - ProductSKU
//
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
```

```
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
```

```
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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OWNER
OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
```

```
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
```

```
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
```

```
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

```
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                 {
                   "fn": "isSet",
                   "argv": [
                      {
                         "ref": "Endpoint"
                      }
                   ]
                 }
              ],
              "rules": [
                 {
```

```
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

            ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
```

```
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }

  ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

              },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
                      "rules": [
                        {
                          "conditions": [],
```

```
      "rules": [
                                        {
                                          "conditions": [],
                                          "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }
                                      ],

                            "type": "tree"
                                    }
                                  ],
                                  "type": "tree"
                                },
                                {
                                  "conditions": [],
                                  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                  "type": "error"
                                }
                              ],
                              "type": "tree"
                            },
                            {

          "conditions": [
                                {
                                  "fn": "booleanEquals",
                                  "argv": [
                                    {
                                      "ref": "UseFIPS"
                                    },
                                    true
                                  ]
                                }
                              ],
                              "rules": [
                                {
                                  "conditions": [
                                    {

                        "fn": "booleanEquals",
                                      "argv": [
                                        {
```

```
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
```

```
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true

                        ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {

                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "rules": [

        {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"

                        }
                                ],
```

```
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
           },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
```

```
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
```

```
                    "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },

        {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
```

```
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
```

```
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
 <li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
 one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
 <p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
```

```
            <p>\n                <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n
<p>The valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
```

```
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
      <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "RegisteredSubscriptionProviders"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
```

```
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
```

```
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {
```

```
      "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

         {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
             "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
             "smithy.api#required": {}
           }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
             "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
             "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
              }
            },
            "SubscriptionProviderStatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
              }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "InProgress",
```

```
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
"list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
            "smithy.api#input":
{}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
        }

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
          "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
        }

  },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
           }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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AssociateLicense
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1.102 aws-sdk-go-v2-service-internal-checksum 1.8.6

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```
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
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  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
```

```
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
```

spanInitializeStart
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RegisterServiceMetadata
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spanInitializeEnd
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InterceptAfterSerialization
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UserAgent
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RecursionDetection
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InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
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OperationDeserializer
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RecordResponseTiming

RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
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InterceptBeforeRetryLoop
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ResolveEndpointV2
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InterceptBeforeDeserialization
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InterceptAttempt
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InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
```

```
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
```

```
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
```

```
            "smithy.api#idempotent": {}

        }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                    }
                },
                "InstanceUserArn": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                    "traits": {
                        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                    }
                },
                "Domain": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
```

```
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
```

```
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
    },
    {
      "conditions": [
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          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
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                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
```

true

```
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
```

```
                ]
              }
            ],
            "rules": [
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                "conditions": [
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"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

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                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
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                    {
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                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                                ],
                                "rules": [
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                                        "conditions": [],
                                        "endpoint": {

                "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

}
                            ],
                            "type": "tree"
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                        {
                            "conditions": [
                                {
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                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
```

```
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
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            },
            {
                "conditions": [],
                "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
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],
"type": "tree"
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
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```
            "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
```

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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
```

```
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
```

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            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
```

```
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Product</p>\n          </li>\n          <li>\n            <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
             "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
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                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"


        }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
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            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
```

```
        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http":
{
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
```

```
            },
            "UpdateSettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
{}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
```

```
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - Beneficiary
//
//   - ProductSKU
//
//   - Fingerprint
//
//   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
```

```
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}
```

```
type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options)) (*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}
```

```
type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
```

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
```

```
    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
```

```
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
```

```
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
```

```
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
```

```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

    }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {

    "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

},
                                    "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
```

```
                "argv": [

                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
                ]
            }
            ]
        }
        ],
        "rules": [
        {
            "conditions": [],

    "rules": [
                {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
                }
            ],

            "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

            "type": "error"
        }
        ],
        "type": "tree"
    },
    {

        "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
```

```
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {

        "fn": "booleanEquals",
                  "argv": [
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    },
                    true

                ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
```

```
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true

          ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {

                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
```

```
        {
                                                "conditions": [],
                                                "endpoint": {
                                                   "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                   "properties": {},
                                                   "headers": {}
                                                },
                                                "type": "endpoint"
                                             }
                                          ],
                                          "type": "tree"

                                    }
                                       ],
                                       "type": "tree"
                                    },
                                    {
                                       "conditions": [],
                                       "error": "DualStack is enabled but this partition does not support DualStack",
                                       "type": "error"
                                    }
                                 ],
                                 "type": "tree"
                              },
                              {
                                 "conditions": [],
                                 "rules": [
                                    {
                                       "conditions": [],
                                       "endpoint": {
                                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                          "properties": {},
                                          "headers": {}
                                       },
                                       "type": "endpoint"
                                    }
                                 ],
                                 "type": "tree"
                              }
                           ],
                           "type": "tree"
                        }
                     ],
                     "type": "tree"
                  },
                  {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
```

```
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },

    {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {

      "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "Missing region",
```

```
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
                }
            ],
            "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
```

```
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
 objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                  }
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
            "type": "structure",
            "members": {
              "Subscriptions": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
```

```
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
```

```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
```

```
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {

                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
```

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
```

```
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
```

```
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

   "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
{}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
              }

    },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
              }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
  }
```

}

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limitations under the License.
AssociateLicense
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spanInitializeStart
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legacyEndpointContextSetter
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OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.103 github.com/aws/aws-sdk-go-v2/service/sts 1.38.2

1.103.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
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legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
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OperationSerializer

```
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
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  spanRetryLoop
  InterceptBeforeRetryLoop
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  InterceptAttempt
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  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]
```

```
  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
```

```
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
```

```
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
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ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
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OperationDeserializer
InterceptBeforeDeserialization
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RequestResponseLogger
InterceptTransmit
CheckoutLicense
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
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ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
```

```
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
             "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
          }
        },
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
      "type": "union",
      "members": {
        "SecretsManagerCredentialsProvider":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/DeleteLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
               }
            }
         },
         "traits": {
```

```
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

      "smithy.api#required": {}
              }
            }
          },
```

```
      "traits": {
        "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
        "Value": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
           "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
```

```
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
```

```
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
   "type": "structure",
   "members": {
      "message": {
         "target": "smithy.api#String"
      }
   },
   "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
   "type": "string",
   "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
   "type": "service",
   "version": "2018-05-10",
   "operations": [
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
      },
      {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
```

```
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id",
                "content-length",

            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
              ],
              "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
              ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region":
 {
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                  "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
```

```
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
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      "conditions": [
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          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
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            {
              "fn": "booleanEquals",
              "argv": [
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                  "ref": "UseFIPS"
                },
                true
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            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
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          "conditions": [
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              "fn": "booleanEquals",
              "argv": [
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                  "ref": "UseDualStack"
                },
                true
              ]
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                }
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              "type": "error"
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              "conditions": [],
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                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
                {
                  "ref": "Region"
                }
              ]
            }
          ],
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              "conditions": [
                {
                  "fn": "aws.partition",

                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
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              "rules": [
                {
                  "conditions": [
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                {
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                  "argv": [
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                      "ref": "UseFIPS"
                    },

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                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
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"fn": "booleanEquals",
                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        }
                      ]
                    },

                {
                      "fn": "booleanEquals",
                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [
                            {
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

                ]
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                ],
                "rules": [
                    {
                        "conditions": [],
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                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
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            "type": "tree"
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            "conditions": [
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                    "argv": [

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                    },
                    true
                ]
            }
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            {
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                    "argv": [
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                        "fn": "getAttr",
                        "argv": [

{
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
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                  {
                    "conditions": [],
                    "endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
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              {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
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```
                    },
                    true
                ]
            }
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            {

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                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

     }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ],
        "type": "tree"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
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            "params": {
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      "UseFIPS": true,
              "UseDualStack": false
            }
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          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
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              "UseDualStack": true
            }
```

```
    },
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      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
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      "params": {
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        "UseFIPS": false,
        "UseDualStack": true
      }
    },
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      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
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      }
    },
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      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
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        "UseDualStack": true
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        }
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        }
      },
      "params": {
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        "UseFIPS": false,
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      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
```

```
      "expect": {
        "endpoint":
{
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        }
      },
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        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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{
            "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
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            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
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```
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
              },
              "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
              }
            },
            "traits": {
```

```
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
               }
            },
            "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of license server.</p>"
               }
            },
            "ServerEndpoint": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
               }
            },
            "LicenseServerEndpointId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
               }
            },
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
               }
            },
```

```
            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "PROVISIONING",
                  "value": "PROVISIONING",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONING_FAILED",
```

```
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "IdentityProviderSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>Product</p>\n            </li>\n            <li>\n               <p>DirectoryId</p>\n
</li>\n         </ul>"
               }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                  "smithy.api#required": {}
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
              }
            },
            "NextToken":
```

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{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n <ul>\n <li>\n <p>Status</p>\n </li>\n <li>\n <p>InstanceId</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "LicenseServerEndpoints"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
```

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                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n  <li>\n    <p>IdentityProviderArn</p>\n  </li>\n</ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListProductSubscriptions"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

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"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",

    "members": {
        "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
        "smithy.api#http": {
            "method": "GET",
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            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
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            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

   },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
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empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

             "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
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            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
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                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
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                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
```

```
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
```

```
resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
           "traits": {
             "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
             "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

       "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
          "smithy.api#error": "client"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
         "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
```

```
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings":
 {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
      <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n               <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n         </ul>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
 {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required":
{}
          }
        },
        "RemoveSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A parameter is not valid.</p>",
        "smithy.api#error": "client"
      }
    }
  }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
```

```
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

```
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
```

```
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
```

```
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
```

```
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
```

```
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string
```

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
```

```
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
```

```
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
```

spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming

RequestResponseLogger
InterceptTransmit
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OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
```

```
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
```

```
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
               }
            },
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                  "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
```

```
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
```

```
        },
        "AccountID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
```

```
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager Linux Subscriptions",
           "arnNamespace": "license-manager-linux-subscriptions",
          "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
```

```
            "type": "Boolean"
        },
        "UseFIPS": {
          "builtIn": "AWS::UseFIPS",
          "required": true,
          "default": false,
          "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
          "type": "Boolean"
        },
        "Endpoint": {
          "builtIn": "SDK::Endpoint",
          "required": false,
          "documentation": "Override the endpoint used to send this request",
          "type": "String"
        }
      },
      "rules": [
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
                {
                  "ref": "Endpoint"
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
```

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {

            "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {

                          "ref": "UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }

    ],
                        "rules": [
                          {
                            "conditions": [
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
```

```
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

                    },
                                                "supportsFIPS"
                                            ]
                                        }
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                                             {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]
                                        }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],

        "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
```

```
                    },
                    {
                      "conditions": [],
                      "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                      "type": "error"
                    }
                  ],
                  "type": "tree"
                },
                {

        "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {

                "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          },
                          true

                      ]
                        }
                      ],
                      "rules": [
                        {
                          "conditions": [],
                          "rules": [
```

```
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
```

```
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
```

```
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
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            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

      },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
```

```
                {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                      }
                     },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {

   "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
```

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      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
      },
```

```
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },

  {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {

   "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
```

```
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",

                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
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            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
```

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            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Subscriptions"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n
<p>The valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>equals</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
         <code>Notequal</code>\n               </p>\n            </li>\n         </ul>"
                  }
               },
               "MaxResults": {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                  "traits": {
                     "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                  }
               },
               "NextToken": {
                  "target": "smithy.api#String",
                  "traits": {
                     "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                     "smithy.api#length": {
                        "min": 1,
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```
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken
length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
    },
    "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
```

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
```

```
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
           }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
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            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

"name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
```

```
            "traits": {

          "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
```

```
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
      "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
```

```
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
```

```
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

       "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
```

```
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key":
{
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
```

```
            "smithy.api#http": {
               "method": "DELETE",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
         "type": "structure",

   "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
         },
         "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
```

```
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client"
      }
    }
  }
}
```


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replaced with your own identifying information. (Don't include
the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
identification within third-party archives.

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limitations under the License.
AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization

Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.104 aws-sdk-go-v2-service-internal-endpoint-discovery 1.11.6

1.104.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer

```
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
```

This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

```
 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
```

```
        with:
          path: new-ref
          fetch-depth: 0
      - name: Get Diff
        run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
      - name: Get Target Files
        run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
      - name: Checkout scancode
        uses: actions/checkout@v2
        with:
          repository: nexB/scancode-toolkit
          path: scancode-toolkit
          fetch-depth: 1
      - name: Set up Python ${{ matrix.python-version }}
         uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
```

Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
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InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd

Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
```

```
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
        "type": "structure",
        "members": {
           "message": {
              "target": "smithy.api#String"
           }
        },
        "traits": {
           "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
           "smithy.api#error": "client"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
           "DirectoryId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
              "traits": {
                 "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
              }
           },
           "ActiveDirectorySettings":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration.</p>"
              }
            },
            "ActiveDirectoryType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
              "traits": {
                "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
          "type": "structure",
          "members": {
            "DomainName": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
              }
            },
            "DomainIpv4List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 2
                }
              }
            },
            "DomainCredentialsProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
```

```
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
```

```
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                  "smithy.api#required": {}
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

```
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
```

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            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
```

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                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
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        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
```

```
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",
```

```
            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
```

```
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [
            {

              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
        },
        {
```

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                "conditions": [],
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                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",

                   "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

```
true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
```

```
                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
```

```
                    "argv": [

                {
                        "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                ]
            },
            true
        ]
    }
],
"rules": [
    {
        "conditions": [],
        "endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
],
"type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"

}
    ],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "rules": [
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```
                {

        "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

                ],
                    "type": "tree"
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                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
                "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        }
      ],
      "type": "tree"
    },
    {
      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

    "UseFIPS": true,
        "UseDualStack": false
      }
```

```
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
```

```
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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                {
                  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
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                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                     "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                  },
```

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      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
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```
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
```

```
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
```

```
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
```

```
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
                }
            },
```

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            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n       </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
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        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
       }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
            }
        },

      "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
```

```
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                  "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                  "smithy.api#length": {
                    "min": 1
                  }
                }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
```

```
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
   <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
       "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
```

```
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
```

```
//
the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
```

```
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT
OWNER
OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE

```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:
   ServiceID,
 OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
 Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
```

CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
```

```
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

       "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
```

```
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/GetServiceSettings"

          },
            "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
```

```
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
```

```
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
          }
        },
        "SubscriptionProviderCreateTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
          }
        },
        "SubscriptionProviderUpdateTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
          }
        },
        "DualSubscription": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
          }
```

```
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
```

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
       },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
```

```
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
```

```
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

        ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
```

```
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

  ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

        },
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [

                             {
                                  "ref": "PartitionResult"
                              },
                              "supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "rules": [
                      {
```

```
                "conditions": [],

        "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],

            "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {

        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
```

```
                "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
 but this partition does not support FIPS",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
```

```
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true

                                ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
                                                        "argv": [
                                                            {

                                                                "ref": "PartitionResult"
                                                            },
                                                            "supportsDualStack"
                                                        ]
                                                    }
                                                ]
                                            }
                                        ],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "rules": [

        {
                                                        "conditions": [],
                                                        "endpoint": {
                                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                            "properties": {},
                                                            "headers": {}
                                                        },
                                                        "type": "endpoint"
                                                    }
                                                ],
                                                "type": "tree"
```

```
                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
```

```
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
```

```
    },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
         },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
```

```
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

         },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                      }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },

          {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
```

```
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled LinuxSubscriptionsDiscovery"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
 </p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
 <li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
```

```
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
   <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
          <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
"<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListLinuxSubscriptions"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "Subscriptions"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

```
    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
         },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
```

```
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
              },
              {

        "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
```

```
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
         "type": "structure",
         "members": {
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
               "traits": {
                  "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
```

```
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
```

```
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {

       "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

       "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
"list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
```

```
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
```

```
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
```

```
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
          "type": "structure",

       "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
{}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
```

```
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

      },
          "Status": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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limitations under the License.
AssociateLicense
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spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
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InterceptAfterSerialization
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InterceptBeforeDeserialization
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InterceptTransmit

1.105 aws-sdk-go-v2-internal-v4a 1.4.6

1.105.1 Available under license :

GetLicense
Initialize stack step
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RegisterServiceMetadata
legacyEndpointContextSetter
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 InterceptBeforeDeserialization
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 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
```

```
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]
```

```
jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
```

are the same. Success."; exit 0; fi
CheckoutBorrowLicense
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  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
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  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
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  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
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  CloseResponseBody
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  OperationDeserializer

InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
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CheckoutLicense
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Retry
InterceptAttempt
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ResolveAuthScheme
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Signing
InterceptAfterSigning
Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
          "type": "structure",
          "members": {
            "DomainName": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
              }
            },
            "DomainIpv4List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 2
                }
              }
            },
            "DomainCredentialsProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
```

```
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
```

```
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
```

```
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

        }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                    }
                },
                "InstanceUserArn": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                    "traits": {
                        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                    }
                },
                "Domain": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                    }
                }
            },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

   "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
```

```
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
        "Value": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
```

```
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
```

```
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },

      "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
          },
          "StatusMessage": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

           "x-api-key",
              "authorization",
              "x-amz-date",
              "x-amz-security-token",
              "Access-Control-Allow-Headers",
              "Access-Control-Allow-Methods",
```

```
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

```
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Endpoint"
        }
      ]
    }
  ],
 "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [
        {

          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
```

```
        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "aws.partition",

                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },
```

true

```
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
```

```
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
```

```
                                    "endpoint": {
                                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

    ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [

 {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [

                    {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
```

```
                                ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
```

```
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

            }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

                        ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                            "headers": {}
                    },
                    "type": "endpoint"
                }
```

```
                    ],
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ]
          },
          "smithy.rules#endpointTests": {
            "testCases": [
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",

      "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
```

```
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
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          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
```

```
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
```

```
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
```

```
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
```

```
            }
        },
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
```

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the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
```

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            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
```

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            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
 <ul>\n            <li>\n                <p>Status</p>\n            </li>\n            <li>\n                <p>InstanceId</p>\n
 </li>\n        </ul>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
```

```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
```

```
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
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```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
           },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
```

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you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
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            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
 "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
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            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {

          "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                  "smithy.api#required": {}
               }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
```

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            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
              }
```

```
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
```

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{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",

        "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

     "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
             "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
            }
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
          }
        },
        "Product": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
          }
        },
        "ProductUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
          }
         }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

       "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
         "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
```

```
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
                }
            },
            "UpdateSettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
```

```
{}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

```
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
```

```
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType
```

```
// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
```

```
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
```

```
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
```

```
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
```

ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },

    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
               "smithy.api#required": {}
             }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
```

```
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>The instance type of the resource.</p>"
               }
            },
            "AccountID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
          }
        },
        "SubscriptionProviderCreateTime": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
```

```
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
```

```
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                                ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "isSet",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

                "fn": "aws.partition",
                                        "argv": [
                                            {
                                                "ref": "Region"
```

```
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                   "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

},
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
```

```
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [

                                                     {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],

        "rules": [
                                                {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],

                                "type": "tree"
                                        }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
```

```
                                {

                "conditions": [
                                        {
                                           "fn": "booleanEquals",
                                           "argv": [
                                              {
                                                 "ref": "UseFIPS"
                                              },
                                              true
                                           ]
                                        }
                                     ],
                                     "rules": [
                                        {
                                           "conditions": [
                                              {

                              "fn": "booleanEquals",
                                                 "argv": [
                                                    {
                                                       "fn": "getAttr",
                                                       "argv": [
                                                          {
                                                             "ref": "PartitionResult"
                                                          },
                                                          "supportsFIPS"
                                                       ]
                                                    },
                                                    true

                                               ]
                                                 }
                                              ],
                                              "rules": [
                                                 {
                                                    "conditions": [],
                                                    "rules": [
                                                       {
                                                          "conditions": [],
                                                          "endpoint": {
                                                             "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                             "headers": {}
                                                          },
                                                          "type": "endpoint"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
but this partition does not support FIPS",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true

      ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {

                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }
                  ]
                }
```

```
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [

        {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          }
        ],
```

```
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://example.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },

    {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

      "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "Missing region",

              "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
```

```
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
```

```
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
```

```
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Subscription</code>\n              </p>\n            </li>\n        </ul>\n        <p>The valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
```

```
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
```

```
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
```

```
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

          "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
 Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
             },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
```

```
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
```

```
                "value": "INVALID",
                "documentation": "INVALID status"
              },
              {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
```

```
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
```

```
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
```

```
    "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
 {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
```

```
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }

          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
```

```
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
           }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
```

```
            "smithy.api#error": "client"
          }
        }
      }
    }
}
```

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the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
identification within third-party archives.

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limitations under the License.
AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
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InterceptAfterSerialization
Build stack step
ClientRequestID
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AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

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InterceptBeforeRetryLoop
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InterceptBeforeDeserialization
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1.106 aws-sdk-go-v2-service-sso 1.29.1

1.106.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
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legacyEndpointContextSetter
SetLogger
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spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
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 Finalize stack step
  spanRetryLoop
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 Deserialize stack step
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  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
```

```
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
```

```
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
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ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
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InterceptAfterSigning
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CloseResponseBody
ResponseErrorWrapper
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OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
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ComputeContentLength
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UserAgent
AddTimeOffsetMiddleware
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Finalize stack step
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InterceptBeforeRetryLoop
Retry

InterceptAttempt
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Deserialize stack step
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CloseResponseBody
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InterceptBeforeDeserialization
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CheckoutLicense
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spanBuildRequestEnd

Finalize stack step
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 InterceptBeforeRetryLoop
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 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
        },
        "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
        },
        "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
                "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
          }
        },
        "DomainIpv4List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 2
            }
          }
        },
        "DomainCredentialsProvider": {
          "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                  "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
              },
              "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#Arn": {
            "type": "string",
            "traits": {
              "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
            "type": "operation",
            "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

    "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
```

```
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
         "type": "structure",
         "members": {
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                  "smithy.api#length": {
                     "min": 1
                  },
```

```
    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
```

```
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

          "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
```

```
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
```

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                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
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                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
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true

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                        ]
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                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
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"fn": "booleanEquals",

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                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
```

```
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

 {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
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                }
            ],
            "rules": [
                {
                    "conditions": [
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                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [

        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
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                            "conditions": [],
                            "endpoint": {

    "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
            ],
            "type": "tree"
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        {
            "conditions": [
                {
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                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

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                {
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                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]

          }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }

            ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
```

```
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

      "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
```

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            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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```
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint":
{
        "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
       "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint":
{
        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
 disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
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```
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
```

```
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
             "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
```

```
            }
          },
          "NextToken":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/ListLicenseServerEndpoints"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "LicenseServerEndpoints"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
      "type": "structure",
      "members": {
```

```
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListProductSubscriptions"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

     "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

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            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
          },
          "errors": [
```

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            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
```

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            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

         }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
```

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 "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
```

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            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
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```
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
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```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {

      "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
             "traits": {
               "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
               "smithy.api#required": {}
             }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
```

```
                "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
```

```
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

        },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
```

```
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
```

```
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
```

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
```

```
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
```

```
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
```

```
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string
```

```
 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
```

```
//
// Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
// trials.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
 OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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OWNER
OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
```

```
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
            "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetRegisteredSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

         },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
```

```
            },
            "LinuxSubscriptionsDiscoverySettings": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
               "traits": {
                  "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
               }
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
```

```
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
```

```
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
```

```
        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                       "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

    ],
                    "rules": [
                      {
                        "conditions": [
```

```
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [
                                                {
                                                  "ref": "PartitionResult"

                    },
                                                "supportsFIPS"
                                              ]
                                            }
                                          ]
                                        },
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [

                                               {
                                                  "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                              ]
                                            }
                                          ]
                                        }
                                      ],
                                      "rules": [
                                        {
                                          "conditions": [],

        "rules": [
                                            {
                                              "conditions": [],
                                              "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                              },
                                              "type": "endpoint"
                                            }
```

```
                                    ],

                "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {

            "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
                                            ]
                                        },
                                        true
```

```
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
 but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
                        {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {

                          "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [

        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"

                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
```

```
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
                }
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
```

```
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                      }

                   },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {

  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                      }
                    },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
```

```
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },

          {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
```

```
      "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "For custom endpoint with fips disabled and dualstack enabled",
               "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
               },
               "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "Missing region",

            "expect": {
                  "error": "Invalid Configuration: Missing Region"
               }
            }
         ],
         "version": "1.0"
      }
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
         },
         {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
         }
      ]
   }
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
```

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the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Instances"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n           <li>\n              <p>\n                 <code>AccountID</code>\n
</p>\n           </li>\n           <li>\n              <p>\n                 <code>AmiID</code>\n              </p>\n           </li>\n
        <li>\n              <p>\n                 <code>DualSubscription</code>\n              </p>\n           </li>\n
<li>\n              <p>\n                 <code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n
  <p>\n                 <code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
    <code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n              <p>\n                 <code>contains</code>\n              </p>\n           </li>\n           <li>\n
<p>\n                 <code>equals</code>\n              </p>\n           </li>\n           <li>\n
              <p>\n                 <code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
```

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        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
```

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        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
               }
            }
         },

         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
         "type": "structure",
         "members": {
            "RegisteredSubscriptionProviders": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
               "traits": {
                  "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
               "method": "GET",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
         "type": "structure",
         "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}

               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
         "type": "structure",
         "members": {
            "tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {

"name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled OrganizationIntegration"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
```

```
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
```

```
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
             "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
```

```
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
       },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
```

```
            "Type": {
               "target": "smithy.api#String",
               "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with
Amazon EC2, Bring Your Own\n       Subscription model (BYOS), or from the Amazon Web Services Marketplace.
Certain subscriptions may use licensing from the\n       Amazon Web Services Marketplace as well as OS licensing
from Amazon EC2 or BYOS.</p>"
               }
            },
            "InstanceCount": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
         "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "RedHat",
                  "value": "RedHat",
                  "documentation": "RedHat subscription provider namespace"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
```

```
        "type":
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                 "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key":
{
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
               "method": "DELETE",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
         "type": "structure",

    "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

```
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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limitations under the License.
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1.107 github.com/aws/aws-sdk-go-v2/service/internal/checksum 1.8.6

1.107.1 Available under license :

GetLicense
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Deserialize stack step
AddRawResponseToMetadata

```
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
```

```
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {
```

```
// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string
```

```
 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

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InterceptAttempt
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Deserialize stack step
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
```

```
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
```

```
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
                }
            },
```

```
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

       {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
    "type": "union",
```

```
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoint": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
               "traits": {
                  "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
               }
            }
         },
          "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

    "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
```

```
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

             "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
```

```
                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
                    "type": "String"
                }
            },
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Endpoint"
                                }
                            ]
                        }
                     ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

```
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
```

```
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",

                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

true

```
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
```

```
"fn": "booleanEquals",
                                    "argv": [
                                      true,
                                      {
                                        "fn": "getAttr",
                                        "argv": [
                                          {
                                            "ref": "PartitionResult"
                                          },
                                          "supportsFIPS"
                                        ]
                                      }
                                    ]
                                  },

                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                      true,
                                      {
                                        "fn": "getAttr",
                                        "argv": [
                                          {
                                            "ref": "PartitionResult"
                                          },
                                          "supportsDualStack"
                                        ]
                                      }

                              ]
                                  }
                                ],
                                "rules": [
                                  {
                                    "conditions": [],
                                    "endpoint": {
                                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                      "properties": {},
                                      "headers": {}
                                    },
                                    "type": "endpoint"
                                  }

  ],
                                "type": "tree"
                              },
                              {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [

 {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [

{
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
```

```
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled but this partition does not support FIPS",
                  "type": "error"

}
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {

    "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

     }
                    ]
                  }
```

```
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }

                                ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                        "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
```

```
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
```

```
{
                    "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
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            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
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```
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
           "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
```

```
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
 false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
```

```
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                    "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                 }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
```

```
            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
            },
            "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
```

\n\t\t\taddress of the RDS license server endpoint. "
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": " The ID of the license server endpoint. "
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
              "smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
            }
          }
        },
        "traits": {

```
            "smithy.api#documentation":
"<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",

                  "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
```

```
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                    "smithy.api#required": {}
                }
            },
```

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            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                 "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
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        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
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        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
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            "uri": "/user/ListUserAssociations"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

      }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
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                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target":
 "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
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            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a product for this user.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductUserArn": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
          }
        },
        "SubscriptionStartDate": {
          "target": "smithy.api#String",
          "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
          }
        },
        "SubscriptionEndDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The end date of a subscription.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
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      "traits": {
        "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 404
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",

      "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

     "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
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servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
```

<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
```

```
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
```

```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
```

```
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        },
        "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
                "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                 "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
            },
            "UpdateSettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n            <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
```

\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required":
{}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization

```
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
```

```
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

```
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:
      region,
 ServiceID:     ServiceID,
 OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string
```

```
// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData
```

```
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
```

```
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
```

```
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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OWNER

```
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LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
```

```
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

        },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",
```

```
   "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
               "traits": {
                  "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
               }
            },
            "LastUpdatedTime": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
               }
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
```

```
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
       "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
```

```
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                  },
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": {
                        "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
```

```
                "ref": "UseFIPS"
                    },
                    true
                ]
                },
                {
                "fn": "booleanEquals",
                "argv": [
                    {
                    "ref": "UseDualStack"
                    },
                    true
                ]
                }

    ],
                "rules": [
                {
                    "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                            {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                            ]
                        }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [

                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
```

```
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {

                "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          },
                          true

                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
```

```
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

{
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
```

```
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
```

```
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

        },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
```

```
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
```

```
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

        "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "Missing region",

          "expect": {
              "error": "Invalid Configuration: Missing Region"
            }
          }
        ],
        "version": "1.0"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
```

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        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
```

\n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
```

```
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
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the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
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        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
```

```
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
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            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

              "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
```

\n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-

```
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
```

```
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
{}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required":
{}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

```
from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
          "traits": {
              "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
              "smithy.api#error": "client"
          }
      }
  }
}
```


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spanBuildRequestEnd
Finalize stack step
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disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning

Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.108 aws-sdk-go-v2-feature-dynamodb-attributevalue 1.20.9

1.108.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection

```
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
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Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
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 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer
```

```
// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
```

```
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing

InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
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Deserialize stack step
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
```

\n\t\t\taddresses, and the credential provider for user administration. "
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about an Active Directory identity provider. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The domain name for the Active Directory. "
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an

```
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
```

```
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

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        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
```

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            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
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information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

   "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
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        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
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            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
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user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
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        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
```

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          "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region":
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
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        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [
              {

                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
```

```
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",

                   "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

```
true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
```

```
                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
```

```
                    "argv": [

                {
                            "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                    ]
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [],
            "endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"

}
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
```

```
                {

        "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

                ],
                    "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
                "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          }
        ],
        "type": "tree"
      },
      {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect":
{
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",

    "UseFIPS": true,
          "UseDualStack": false
        }
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```
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
 true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
```

```
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
```

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        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
```

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      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
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```
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
```

```
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
```

```
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
```

```
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
               }
            },
            "NextToken":
 {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
               }
            },
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n       </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

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            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

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    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
       }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
            }
        },

    "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",

        "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
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            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
   <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
```

```
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
```

```
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
```

```
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
```

```
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
```

```
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
```

InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
```

```
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

        "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
```

```
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
```

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
```

```
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
```

```
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
      },
      {
        "conditions": [],
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {

            "fn": "aws.partition",
                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                       "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
```

```
                                        "ref": "PartitionResult"

                    },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                     {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {

      "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

            "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [
                      {
                        "conditions": [],
```

```
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

```
                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
```

```
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ],
 "type": "tree"
 }
 ]
},
"smithy.rules#endpointTests": {
 "testCases": [
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

 }
   },
   "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
   }
  },
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
    }
   },
   "params": {
    "Region": "us-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
```

```
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                      }
                     },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {

 "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

        },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
            },
            "params": {
              "Region": "us-isob-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },

    {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {

      "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
```

```
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",

                "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional
  objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
```

```
"<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
```

```
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"

              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
 return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
 nextToken from a previously truncated response.</p>"
              }
            }
          },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
```

```
        "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
        "smithy.api#http": {
          "method": "GET",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#readonly": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
```

```
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
```

```
          "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#input": {}
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
            "type": "structure",
            "members": {
              "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                  "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
                }
              },
              "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
                }
              },
              "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#output": {}
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
            "type": "structure",
            "members": {
              "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                  "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
              },
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
      "type": "list",
      "member": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
               },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
    },
    "value": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the subscription.</p>"
        }
      },
      "Type": {
        "target": "smithy.api#String",
        "traits": {

      "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
        }
```

```
            },
            "InstanceCount": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
         "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "RedHat",
                  "value": "RedHat",
                  "documentation": "RedHat subscription provider namespace"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
```

```
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
```

```
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
```

```
Region.</p>"
                }
            }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization

OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.109 github.com/aws/aws-sdk-go-v2/internal/configsources 1.4.6

1.109.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
```

```
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
```

```
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
```

```
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
```

```
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }} ${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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InterceptAfterSigning
Deserialize stack step
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
```

```
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
          }
        },
        "DomainIpv4List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 2
            }
          }
        },
        "DomainCredentialsProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
          }
        },
        "DomainNetworkSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

    "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
```

```
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

       {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
```

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            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
```

```
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
```

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Manager user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
```

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operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

      "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
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                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
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```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
```

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    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
```

```
            }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
          }
        },
        "AssociationDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
          }
        },
        "DisassociationDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
```

```
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

           "x-api-key",
              "authorization",
              "x-amz-date",
```

```
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
```

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"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [
          {

            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "endpoint": {
          "url": {
```

```
                        "ref": "Endpoint"
                    },

    "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "aws.partition",

                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },

true
                                    ]
```

```
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

"fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },

                    {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }

            ]
                        }
                    ],
```

```
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
```

```
                {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
```

```
        "conditions": [
                                {
                                   "fn": "booleanEquals",
                                   "argv": [
                                      true,
                                      {
                                         "fn": "getAttr",
                                         "argv": [
                                            {
                                               "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                         ]

         }
                                   ]
                                }
                             ],
                             "rules": [
                                {
                                   "conditions": [],
                                   "endpoint": {
                                      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                      "properties": {},
                                      "headers": {}
                                   },
                                   "type": "endpoint"
                                }

                          ],
                                "type": "tree"
                             },
                             {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                             }
                          ],
                          "type": "tree"
                       },
                       {
                          "conditions": [],
                          "endpoint": {
                             "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
                "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        }
      ],
      "type": "tree"
    },
    {
      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

    "UseFIPS": true,
        "UseDualStack": false
      }
    },
```

```
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS":
 true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
```

```
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
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      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
```

```
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
```

```
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
      "ProvisioningStatus": {
        "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
        "traits": {
          "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
        }
      },
      "HealthStatus": {
        "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
        "traits": {
          "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
        }
      },
      "Ipv4Address": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
```

```
        "IdentityProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>"
          }
        },
        "ServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
          }
        },
        "LicenseServerEndpointId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
          }
        },
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
          }
        },
        "LicenseServerEndpointProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
           "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
          }
```

```
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
               }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "PROVISIONING",
                  "value": "PROVISIONING",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONING_FAILED",

                 "value": "PROVISIONING_FAILED",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONED",
                  "value": "PROVISIONED",
```

```
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
               }
            },
            "NextToken":
 {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
               }
            },
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n       </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
       }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
            }
        },

      "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
```

```
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
```

```
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
       "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
```

```
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
```

```
//
the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
```

```
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE

```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:
   ServiceID,
 OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
 Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
```

CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
```

```
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

       "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
```

```
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
```

```
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
```

```
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
```

```
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
```

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
       },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
```

```
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
```

```
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

        ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
```

```
            "type": "tree"

        }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                      "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

  ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

              },
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [

                             {
                                "ref": "PartitionResult"
                              },
                              "supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "rules": [
                      {
```

```
                "conditions": [],

        "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],

            "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {

        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
```

```
                "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
 but this partition does not support FIPS",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
```

```
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true

                                ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
                                                        "argv": [
                                                            {

                                                            "ref": "PartitionResult"
                                                            },
                                                            "supportsDualStack"
                                                        ]
                                                    }
                                                ]
                                            }
                                        ],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "rules": [

        {
                                                        "conditions": [],
                                                        "endpoint": {
                                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                            "properties": {},
                                                            "headers": {}
                                                        },
                                                        "type": "endpoint"
                                                    }
                                                ],
                                                "type": "tree"
```

```
                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
```

```
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
```

```
    },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
         },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
```

```
                {
                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                    }

                 },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                      }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },

          {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
```

```
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled LinuxSubscriptionsDiscovery"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
 </p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
 <li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
```

```
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
   <li>\n            <p>\n                <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
          <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
"<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListLinuxSubscriptions"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "Subscriptions"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

```
match a certain subscription's name.</p>\n <p>The valid names for this filter are:</p>\n <ul>\n
<li>\n <p>\n <code>Subscription</code>\n </p>\n </li>\n </ul>\n
<p>The valid Operators for this filter are:</p>\n <ul>\n <li>\n <p>\n
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

```
    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
         },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
```

```
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
              },
              {

        "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
```

```
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
```

```
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
      "target": "smithy.api#String"
```

```
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {

       "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

       "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
"list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
```

```
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
```

```
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
```

```
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
          "type": "structure",

       "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
{}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
```

```
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

      },
          "Status": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing

InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.110 aws-sdk-go-v2-service-dynamodb 1.50.1

1.110.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop

```
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
```

```
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer
```

```
// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
 OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing

```
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
//
//   - ProductSKU
//
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
   "smithy": "2.0",
   "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
          "DirectoryId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
```

```
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n <note>\n <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n </note>",
        "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {
```

```
    "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
```

```
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
```

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            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
              }
            },
            "InstanceUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
```

```
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
```

```
            },
            "Products": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                  "smithy.api#required": {}
               }
            },
            "LastStatusCheckDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date of the last status check.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
```

```
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
```

```
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

             "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region":
{
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
```

```
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
```

```
                {
                  "fn": "aws.partition",

                 "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },

true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {

"fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
```

```
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }

            ]
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [

{
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [

                {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {

          "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
```

```
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

    }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]

         }
                                                ]
                                            }
                                        ],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
```

```
                                    },
                                    "type": "endpoint"
                                }

                            ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
```

```
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

"UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS":
true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
                    }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
```

```
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
```

```
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                      "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
```

```
            },
            "LicenseServerEndpointId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
               }
            },
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
               }
            },
            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
               }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
               }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
```

```
      "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "PROVISIONING",
          "value": "PROVISIONING",
          "documentation": ""
        },
        {
          "name": "PROVISIONING_FAILED",

         "value": "PROVISIONING_FAILED",
          "documentation": ""
        },
        {
          "name": "PROVISIONED",
          "value": "PROVISIONED",
          "documentation": ""
        },
        {
          "name": "DELETING",
          "value": "DELETING",
          "documentation": ""
        },
        {
          "name": "DELETION_FAILED",
          "value": "DELETION_FAILED",
          "documentation": ""
        },
        {
          "name": "DELETED",
          "value": "DELETED",
          "documentation": ""
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
      "smithy.api#enum": [
        {
          "name": "HEALTHY",
          "value": "HEALTHY",
```

```
                "documentation": ""
              },
              {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
```

```
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n       </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                  "smithy.api#required": {}
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
```

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empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
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                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                 "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
```

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            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
               }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
         "type": "structure",

       "members": {
            "ProductUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
           },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListUserAssociations"
       },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "InstanceUserSummaries"
      }
    }
  },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

      }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
```

```
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

           "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                  "smithy.api#required": {}
               }
            },

          "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                  "smithy.api#required": {}
               }
            },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
```

```
            "target": "smithy.api#String",

        "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

       "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
```

```
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "RDS_SAL",
                  "value": "RDS_SAL",
                  "documentation": ""
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
            "type": "structure",
            "members": {
              "message": {
                "target": "smithy.api#String"
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
              "smithy.api#error": "client"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#Settings": {

        "type": "structure",
            "members": {
              "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                  "smithy.api#length": {
                    "min": 1
                  },
                  "smithy.api#required": {}
                }
              },
              "SecurityGroupId": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
```

```
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
```

```
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
               }
             }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
         "type": "list",
         "member": {
            "target": "smithy.api#String"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
         }
      },
```

```
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
```

```
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
          "type": "structure",
           "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
              }
            },
            "UpdateSettings":
 {
              "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
              "traits": {
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
  }
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

```
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
```

```
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
```

```
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
```

```
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
```

```
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
```

```
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
```

Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

      {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
         "type": "structure",
         "members": {
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
         "type": "structure",
```

```
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>The instance type of the resource.</p>"
               }
            },
            "AccountID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

  "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
          }
        },
        "SubscriptionProviderCreateTime": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
```

```
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
```

```
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

          }
          ],
          "type": "tree"
        },
        {
          "conditions": [],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {

          "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
```

```
                }
            ],
            "assign": "PartitionResult"
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }

],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
```

```
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [

                                                     {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],

        "rules": [
                                                {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],

                                "type": "tree"
                                        }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
```

```
                                {

                "conditions": [
                                        {
                                           "fn": "booleanEquals",
                                           "argv": [
                                              {
                                                 "ref": "UseFIPS"
                                              },
                                              true
                                           ]
                                        }
                                     ],
                                     "rules": [
                                        {
                                           "conditions": [
                                              {

                              "fn": "booleanEquals",
                                                 "argv": [
                                                    {
                                                       "fn": "getAttr",
                                                       "argv": [
                                                          {
                                                             "ref": "PartitionResult"
                                                          },
                                                          "supportsFIPS"
                                                       ]
                                                    },
                                                    true

                                               ]
                                              }
                                            ],
                                            "rules": [
                                               {
                                                  "conditions": [],
                                                  "rules": [
                                                     {
                                                        "conditions": [],
                                                        "endpoint": {
                                                           "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                           "headers": {}
                                                        },
                                                        "type": "endpoint"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
but this partition does not support FIPS",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true

      ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {

                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }
                  ]
                }
```

```
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [

        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                        ],
                        "type": "tree"

                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
```

```
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://example.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },

    {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

      "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "Missing region",

              "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
```

```
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
            <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
                <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
```

```
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
```

```
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n        <p>The valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
      length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
```

```
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
```

```
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

"name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
```

```
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
 Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
             },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
```

```
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
```

```
                "value": "INVALID",
                "documentation": "INVALID status"
              },
              {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
```

```
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
```

```
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
```

```
    "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
 {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
```

```
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }

          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
```

```
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
           }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
```

```
            "smithy.api#error": "client"
          }
        }
      }
    }
}
```


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setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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OperationSerializer
InterceptAfterSerialization
Build stack step
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RequestResponseLogger
InterceptTransmit

1.111 aws-sdk-go-v2-config 1.31.6

1.111.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
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RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
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Serialize stack step
spanBuildRequestStart
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```
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
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  InterceptBeforeDeserialization
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  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
```

```
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
```

```
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
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UserAgent
AddTimeOffsetMiddleware
RecursionDetection
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Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry

InterceptAttempt
RetryMetricsHeader
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GetIdentity
ResolveEndpointV2
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setLegacyContextSigningOptions
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InterceptAfterSigning
Deserialize stack step
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InterceptBeforeDeserialization
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CheckoutLicense
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 InterceptAfterSigning
Deserialize stack step
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 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
        },
        "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
        },
        "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
                "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
    "type": "structure",
    "members": {
        "DomainName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
        },
        "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 2
                }
            }
        },
        "DomainCredentialsProvider": {
            "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                  "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
              },
              "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#Arn": {
            "type": "string",
            "traits": {
              "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
            "type": "operation",
            "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

    "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
```

```
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
```

```
    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
```

```
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

          "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
```

```
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
```

```
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

true

```
                        ]
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                          {
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                                        ]
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
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                            "type": "endpoint"
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both",
                    "type": "error"
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                    "argv": [

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                                    "argv": [

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                                "headers": {}
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                    "type": "error"

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                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]

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                    }
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

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                                "headers": {}
                            },
                            "type": "endpoint"
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            "conditions": [],
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            "type": "error"
        }
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},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
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                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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              },
              "params": {
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              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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                }
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              }
            },
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              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
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true,
            "UseDualStack": true
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        {
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          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
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          }
        },
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          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
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{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
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          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
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        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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    }
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    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint":
{
        "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
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    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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        "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
       "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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{
        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
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            }
          },
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            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
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            }
          },
          "params": {
            "Region": "us-east-1",
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            "UseDualStack":
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            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
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          "expect": {
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              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
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```
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
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              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
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                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
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                    "value": "PROVISIONING",
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            "documentation": ""
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          {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
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            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
     "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
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                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
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        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Product</p>\n          </li>\n          <li>\n          <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
             "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
```

```
            }
          },
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{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/ListLicenseServerEndpoints"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "LicenseServerEndpoints"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
      "type": "structure",
      "members": {
```

```
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

     "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
          },
          "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
```

```
 "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
```

```
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
              "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
          "type": "structure",
          "members": {
            "Endpoint": {

           "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
          "type": "union",
          "members": {
            "RdsSalSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
          }
        },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
             "traits": {
               "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
```

```
                "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
```

```
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

        },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
```

```
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
```

```
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
```

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
```

```
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
```

```
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
```

```
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string
```

```
 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
```

```
//
// Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
// trials.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
 OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
```

```
    "type": "integer"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
    "type": "long"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
      },

  {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/DeregisterSubscriptionProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
    "type": "structure",
    "members": {
      "SubscriptionProviderArn": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
          "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
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```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetRegisteredSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
```

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            },
            "LinuxSubscriptionsDiscoverySettings": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
               "traits": {
                  "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
               }
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
```

```
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
```

```
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
```

```
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
          ],
          "traits": {
            "aws.api#service": {
              "sdkId": "License Manager Linux Subscriptions",
               "arnNamespace": "license-manager-linux-subscriptions",
              "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
              "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
              "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
              ],
              "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
              ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region": {
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
```

```
        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                       "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

    ],
                    "rules": [
                      {
                        "conditions": [
```

```
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [
                                                {
                                                  "ref": "PartitionResult"

                    },
                                                "supportsFIPS"
                                              ]
                                            }
                                          ]
                                        },
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [

                                               {
                                                  "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                              ]
                                            }
                                          ]
                                        }
                                      ],
                                      "rules": [
                                        {
                                          "conditions": [],

        "rules": [
                                            {
                                              "conditions": [],
                                              "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                              },
                                              "type": "endpoint"
                                            }
```

```
                                ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

            "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {

                "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
                                            ]
                                        },
                                        true
```

```
                ]
                }
                ],
                "rules": [
                {
                "conditions": [],
                "rules": [
                {
                "conditions": [],
                "endpoint": {
                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                "headers": {}
                },
                "type": "endpoint"
                }
                ],
                "type": "tree"
                }
                ],
                "type": "tree"
                },
                {
                "conditions": [],
                "error": "FIPS is enabled
 but this partition does not support FIPS",
                "type": "error"
                }
                ],
                "type": "tree"
                },
                {
                "conditions": [
                {
                "fn": "booleanEquals",
                "argv": [
                {
                "ref": "UseDualStack"
                },
                true

                ]
                }
                ],
                "rules": [
                {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {

                          "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [

        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"

                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
```

```
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
                }
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
```

```
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                      }

                   },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {

  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                      }
                    },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
```

```
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },

            {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
    disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
```

```
      "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "For custom endpoint with fips disabled and dualstack enabled",
               "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
               },
               "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "Missing region",

            "expect": {
                  "error": "Invalid Configuration: Missing Region"
               }
            }
         ],
         "version": "1.0"
      }
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
         },
         {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
         }
      ]
   }
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
```

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the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Instances"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n           <li>\n              <p>\n                 <code>AccountID</code>\n
</p>\n           </li>\n           <li>\n              <p>\n                 <code>AmiID</code>\n              </p>\n           </li>\n
        <li>\n              <p>\n                 <code>DualSubscription</code>\n              </p>\n           </li>\n
<li>\n              <p>\n                 <code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n
  <p>\n                 <code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
    <code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n              <p>\n                 <code>contains</code>\n              </p>\n           </li>\n           <li>\n
<p>\n                 <code>equals</code>\n              </p>\n           </li>\n           <li>\n
              <p>\n                 <code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
```

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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "Subscriptions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
         "type": "operation",
         "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
         },
         "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
         },
```

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        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
               }
            }
         },

         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
         "type": "structure",
         "members": {
            "RegisteredSubscriptionProviders": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
               "traits": {
                  "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
               "method": "GET",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
         "type": "structure",
         "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}

               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
         "type": "structure",
         "members": {
            "tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {

"name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled OrganizationIntegration"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
```

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      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
```

```
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
             "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
```

```
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
     },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
```

```
            "Type": {
              "target": "smithy.api#String",
              "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
              }
            },
            "InstanceCount": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
          "type": "list",

         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
```

```
        "type":
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                 "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key":
{
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
               "method": "DELETE",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
         "type": "structure",

    "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

```
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
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RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
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Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
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Build stack step
ClientRequestID
ComputeContentLength
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Finalize stack step
spanRetryLoop
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Retry
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ResolveAuthScheme
GetIdentity
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disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.112 github.com/aws/aws-sdk-go-v2/service/s3 1.87.3

1.112.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

```
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
```

```
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
```

```
        with:
          path: sdkbase
          ref: ${{ github.base_ref }}
      - name: Checkout this ref
        uses: actions/checkout@v2
        with:
          path: new-ref
          fetch-depth: 0
      - name: Get Diff
        run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
      - name: Get Target Files
        run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
      - name: Checkout scancode
        uses: actions/checkout@v2
        with:
          repository: nexB/scancode-toolkit
          path: scancode-toolkit
          fetch-depth: 1
      - name: Set up Python ${{ matrix.python-version }}
         uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
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spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
```

```
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
```

```
            },
            "ActiveDirectorySettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
```

contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
```

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                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
             "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
```

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      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
```

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/DeleteLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
```

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            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
```

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                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

      "smithy.api#required": {}
              }
            }
          },
```

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      "traits": {
        "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
        "Value": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
           "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
```

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            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
              }
            },
             "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
```

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            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
```

```
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
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          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
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          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
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              "content-type",
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                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id",
                "content-length",

            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
              ],
              "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
              ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region":
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                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                  "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
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      "type": "Boolean"
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    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
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      "type": "String"
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      "conditions": [
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          "argv": [
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              "ref": "Endpoint"
            }
          ]
        }
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              "argv": [
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                },
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            }
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          "type": "error"
        },
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          "conditions": [
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              "fn": "booleanEquals",
              "argv": [
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                },
                true
              ]
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              "type": "error"
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                  "ref": "Endpoint"
                },

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              "type": "endpoint"
            }
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              "argv": [
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                  "ref": "Region"
                }
              ]
            }
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          "rules": [
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                  "argv": [
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                    }
                  ],
                  "assign": "PartitionResult"
                }
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              "rules": [
                {
                  "conditions": [
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                    },

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                  "argv": [
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                      "ref": "UseDualStack"
                    },
                    true
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                          "fn": "getAttr",
                          "argv": [
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                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        }
                      ]
                    },

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                      "fn": "booleanEquals",
                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [
                            {
```

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                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "type": "tree"
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                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
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        "type": "tree"
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                "argv": [

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{
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
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                        "endpoint": {

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                            "headers": {}
                        },
                        "type": "endpoint"
                    }
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            {
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                "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
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                    "argv": [
                        {
                            "ref": "UseDualStack"
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```
                    },
                    true
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            }
        ],
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                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

     }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "type": "error"
            }
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
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              "type": "tree"
            },
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              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
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            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
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                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
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                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
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                    "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                  }
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                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS":
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                  "UseDualStack": true
                }
```

```
    },
    {
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      "expect": {
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          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
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    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
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        "UseFIPS": false,
        "UseDualStack": true
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      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
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        }
      },
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        "UseDualStack": true
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    {
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        }
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        }
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        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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        }
      },
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        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
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      "expect": {
        "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
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        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
            "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
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            "UseFIPS": false,
            "UseDualStack": false
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        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
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                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
              },
              "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
              }
            },
            "traits": {
```

```
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
```

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            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "PROVISIONING",
                  "value": "PROVISIONING",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONING_FAILED",
```

```
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
```

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            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                  "smithy.api#required": {}
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
              }
            },
            "NextToken":
```

```
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n <ul>\n <li>\n <p>Status</p>\n </li>\n <li>\n <p>InstanceId</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
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```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "LicenseServerEndpoints"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
```

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                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n  <li>\n    <p>IdentityProviderArn</p>\n  </li>\n</ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListProductSubscriptions"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
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"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",

    "members": {
        "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
        "smithy.api#http": {
            "method": "GET",
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            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
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            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
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empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

             "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
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            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
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                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
```

```
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
```

```
resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
           "traits": {
             "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
             "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

       "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
          "smithy.api#error": "client"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
         "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
```

```
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings":
 {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
      <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n               <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n         </ul>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
 {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required":
{}
          }
        },
        "RemoveSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A parameter is not valid.</p>",
        "smithy.api#error": "client"
      }
    }
  }
}
```

DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization

```
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
```

```
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

```
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:
      region,
 ServiceID:     ServiceID,
 OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string
```

```
// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData
```

```
 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
```

```
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
```

```
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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```
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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
```

```
            },
            "Operator": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
               "traits": {
                  "smithy.api#documentation": "<p>An operator for filtering results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
         },
         "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
               "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",
```

```
   "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
               "traits": {
                  "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
               }
            },
            "LastUpdatedTime": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
               }
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
```

```
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
       "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
```

```
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                  },
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": {
                        "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
```

```
                "ref": "UseFIPS"
                    },
                    true
                ]
                },
                {
                "fn": "booleanEquals",
                "argv": [
                    {
                    "ref": "UseDualStack"
                    },
                    true
                ]
                }

    ],
                "rules": [
                {
                    "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                            {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                            ]
                        }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [

                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
```

```
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {

                "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          },
                          true

                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
```

```
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

{
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
```

```
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
```

```
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                    }

            },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                    }
                 },
                "params": {
```

```
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
```

```
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
```

```
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

        "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "Missing region",

          "expect": {
              "error": "Invalid Configuration: Missing Region"
            }
          }
        ],
        "version": "1.0"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
```

\n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
```

```
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
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the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
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        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
```

```
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
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            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

            "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
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```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
```

\n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-

```
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
             },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
         },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

```
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
```

```
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required":
{}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

```
from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
          "traits": {
              "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
              "smithy.api#error": "client"
          }
      }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning

Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

```
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
```

```
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
```

```
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
```

```
= addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 OperationName: "CreateLicense",
}
```

```
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
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UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

```
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
}
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
        "type": "structure",
        "members": {
           "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
          "DirectoryId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
```

```
            "DomainIpv4List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 2
                }
              }
            },
            "DomainCredentialsProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
```

```
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
```

```
      "traits": {

    "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
```

```
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
```

the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": " The tags that apply for the license server endpoint. "
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/DeleteLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
       },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/DisassociateUser"
          },
          "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
```

```
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
```

```
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
               "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
               "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
```

```
                "smithy.api#required": {}
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
```

```
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
 },
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
 },
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
   "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
```

```
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

          "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region":
{
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
```

```
            "type": "String"
        },
        "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
        },
        "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
```

```
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
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                "rules": [
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                    "conditions": [
                      {
                        "fn": "aws.partition",

                       "argv": [
                            {
                              "ref": "Region"
                            }
                          ],
                          "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseFIPS"
                              },

true
                              ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "rules": [
                          {
                            "conditions": [
                              {

"fn": "booleanEquals",
                                  "argv": [
                                    true,
                                    {
                                      "fn": "getAttr",
                                      "argv": [
```

```
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                },

            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }

        ]
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
```

```
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [

{
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [

                {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
```

```
                    },
                    {
                      "conditions": [],
                      "error": "FIPS is enabled but this partition does not support FIPS",
                      "type": "error"

}
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
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                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]

    }
                            ]
                          }
                        ],
                        "rules": [
                          {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-manager-user-
```

```
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

                            ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
```

```
{
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",

        "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint":
{
                        "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
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            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
```

```
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
               }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
      "type": "structure",
      "members": {
        "ProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
          "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
```

```
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
```

```
{
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
              }
            },
            "LicenseServerEndpointId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
              }
            },
            "LicenseServerEndpointProvisioningStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
              }
            },
            "LicenseServers": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
              }
            },
            "CreationTime": {
              "target": "smithy.api#Timestamp",
              "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
          "type": "string"
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
         },
         {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
         },
         {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
         },
         {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
         },
         {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
         },
         {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
         }
      ]
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
   "type": "string",
```

```
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                    "smithy.api#required": {}
                }
            },
             "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
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                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n            <li>\n                <p>InstanceId</p>\n
</li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
{}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints </p>",
            "smithy.api#http": {
               "code": 200,
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            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
             "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
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            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
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            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
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      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
        "smithy.api#http": {
          "method": "GET",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#readonly": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
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        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
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            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

      }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
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        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

           "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
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user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
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            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
         }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",

      "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

     "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
```

```
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
```

```
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
```

```
            {

        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
             }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
```

```
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
```

```
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

       "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
 {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
```

```
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
            }
          },
          "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
    }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

```
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {
```

```
 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
```

```
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
```

```
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}
```

```
type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string
```

```
 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
```

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

        {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                 "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {},
          "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
```

```
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

      "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
           }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
        },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
        },
        "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
```

```
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your
```

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instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
```

```
        "aws.api#service": {
          "sdkId": "License Manager Linux Subscriptions",
           "arnNamespace": "license-manager-linux-subscriptions",
          "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
```

```
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
                    ],
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                        {
                            "conditions": [
                                {
```

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                "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {

                          "ref": "UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }

],
                        "rules": [
                          {
                            "conditions": [
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"

                    },
                                          "supportsFIPS"
```

```
                ]
              }
            ]
          },
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",
                "argv": [

                 {
                      "ref": "PartitionResult"
                  },
                  "supportsDualStack"
                ]
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [],

    "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],

            "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
              "type": "error"
```

```
                }
            ],
            "type": "tree"
        },
        {

    "conditions": [
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                    "argv": [
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                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

                "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
```

```
    "properties": {},
                                                "headers": {}
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                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true


                ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {

                                                "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
```

```
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                    }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
```

```
                        ],
                        "type": "tree"
                      }
                    ],
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
```

```
                {

              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                    }

            },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {

             "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
```

```
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
```

```
                {
                  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                    }

                 },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
```

```
    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },

        {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {

          "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
```

```
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",

                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
          <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
```

```
"NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n          <p>The valid names for this filter are:</p>\n          <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n          </li>\n          </ul>\n
<p>The valid Operators for this filter are:</p>\n          <ul>\n          <li>\n              <p>\n
<code>contains</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
<code>equals</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
        <code>Notequal</code>\n              </p>\n          </li>\n          </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
```

```
        "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"

                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
```

```
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

     "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
        "smithy.api#http": {
          "method": "GET",
```

```
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
```

```
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {

             "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
```

Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":

```
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
```

```
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

       "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
```

```
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
```

```
                "documentation": "ACTIVE status"
            },
            {
                "name": "INVALID",
                "value": "INVALID",
                "documentation": "INVALID status"
            },
            {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
```

```
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
         "type": "structure",
         "members": {
            "LinuxSubscriptionsDiscovery": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
               "traits": {
                  "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                  "smithy.api#required":
{}
               }
            },
            "LinuxSubscriptionsDiscoverySettings": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
               "traits": {
                  "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                  "smithy.api#required": {}
               }
            },
            "AllowUpdate": {
               "target": "smithy.api#Boolean",
               "traits": {
                  "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
               }
            }
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
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Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
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ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
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CloseResponseBody
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InterceptBeforeDeserialization
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RequestResponseLogger
InterceptTransmit
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InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID

ComputeContentLength
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UserAgent
AddTimeOffsetMiddleware
RecursionDetection
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Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
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ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.114 github.com/aws/aws-sdk-go-v2/feature/dynamodb/attributevalue 1.20.9

1.114.1 Available under license :

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Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
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InterceptAfterSerialization
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RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
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setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
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ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
name: License Scan

on: [pull_request]

```
jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
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are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
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// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
```

```
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
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 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
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 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
```

```
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
```

Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
          "DirectoryId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
            "traits": {
              "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
          },
          "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
```

```
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
```

```
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
```

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            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
```

```
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                  "smithy.api#required": {}
               }
            },
            "Tags": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/DeleteLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "LicenseServerEndpointArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
           "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
         "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
               }
            },
```

```
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}

    }
     },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
```

```
domain.</p>",
                    "smithy.api#length": {
                       "min": 1
                    },

    "smithy.api#required": {}
                }
             }
          },
          "traits": {
             "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
       },
       "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
             "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                   "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
             },
             "Operation": {
                "target": "smithy.api#String",
                "traits": {
                   "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
             },
             "Value": {
                "target": "smithy.api#String",
                "traits":
{
                   "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
             }
          },
          "traits": {
             "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
       },
       "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
             "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
       },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
            "smithy.api#required": {}
```

```
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
```

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subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
```

```
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

      "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
```

```
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
```

```
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                  "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
                {
                  "ref": "Region"
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "aws.partition",

                  "argv": [
                    {
```

```
                "ref": "Region"
              }
            ],
            "assign": "PartitionResult"
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
```

true

```
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
```

"fn": "booleanEquals",

```
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
```

```
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

                ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

    ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
```

```
{
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                                {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {

                        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

    }
                    ],
```

```
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

         }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
```

```
                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

      "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
```

```
                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack":
 false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error":
```

```
"Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
```

```
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
```

```
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
         },
         {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
         },
         {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
         },
         {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
         },
         {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
         },
         {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
         }
      ]
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
   "type": "string",
    "traits": {
      "smithy.api#enum": [
         {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
         },
         {
```

```
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n<li>\n<p>Product</p>\n</li>\n<li>\n<p>DirectoryId</p>\n</li>\n</ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
```

```
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
               "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
```

```
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {

    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
```

```
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/ListUserAssociations"
         },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceUserSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
      "type": "structure",
```

```
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
```

```
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {

           "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
```

```
        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
```

```
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },

          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
```

provider. \n   <note>\n
  Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n   </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The user name
 from the identity provider of the user. ",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": " An object that specifies details for the identity provider. ",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n   ",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
              }

```
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
      "smithy.api#http": {
        "method": "PUT",
        "uri": "/tags/{ResourceArn}"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
```

```
            },
            "TagKeys": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                   "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
         "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
 {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - ProductSKU
//
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
```

```
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
```

```
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
```

```
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
```

```
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
```

```
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

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you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
```

```
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

            ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
```

```
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }

  ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

              },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
                      "rules": [
                        {
                          "conditions": [],
```

```
      "rules": [
                                        {
                                          "conditions": [],
                                          "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }
                                      ],

                              "type": "tree"
                                    }
                                  ],
                                  "type": "tree"
                                },
                                {
                                  "conditions": [],
                                  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                  "type": "error"
                                }
                              ],
                              "type": "tree"
                            },
                            {

          "conditions": [
                                {
                                  "fn": "booleanEquals",
                                  "argv": [
                                    {
                                      "ref": "UseFIPS"
                                    },
                                    true
                                  ]
                                }
                              ],
                              "rules": [
                                {
                                  "conditions": [
                                    {

                        "fn": "booleanEquals",
                                        "argv": [
                                          {
```

```
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
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```
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [

        {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"

                        }
                    ],
```

```
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
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```
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
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```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
           },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
```

```
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
```

```
                    "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },

        {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
```

```
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
```

```
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
 <li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
 one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
 <p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
```

```
            <p>\n                <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n
<p>The valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
```

```
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "RegisteredSubscriptionProviders"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
```

```
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
```

```
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {
```

```
    "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
             "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
             "smithy.api#required": {}
           }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
             "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
             "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
              }
            },
            "SubscriptionProviderStatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
              }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "InProgress",
```

```
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
"list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                 "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key":
{
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
            "smithy.api#input":
{}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
        }

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
          "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
        }

  },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
           }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization

OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity

```
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
```

```
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
```

spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming

RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer

InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
```

```
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
        "type": "structure",
        "members": {
           "message": {
              "target": "smithy.api#String"
           }
        },
        "traits": {
           "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
           "smithy.api#error": "client"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
          }
        },
        "DomainIpv4List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
            "smithy.api#length": {
              "min": 1,
```

```
                    "max": 2
                }
            }
        },
        "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
        },
        "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
```

```
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/DeleteLicenseServerEndpoint"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                "smithy.api#required": {}
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
```

```
                "smithy.api#length": {
                    "min": 1
                },

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
```

```
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
               "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
               "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
               "smithy.api#required": {}
            }
          },
           "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
               "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
               "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
               "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
               "smithy.api#required": {}
            }
```

```
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
               }
            },
            "FailureMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
         "type": "list",
         "member": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                  "smithy.api#required": {}
               }
            },
            "Products": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                  "smithy.api#required": {}
```

```
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },

      "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
               }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
              }
            },
            "AssociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
              }
            },
            "DisassociationDate": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
```

```
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

      "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
```

```
        },
        "UseFIPS": {
          "builtIn": "AWS::UseFIPS",
          "required": true,
          "default": false,
          "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
          "type": "Boolean"
        },
        "Endpoint": {
          "builtIn": "SDK::Endpoint",
          "required": false,
          "documentation": "Override the endpoint used to send this request",
          "type": "String"
        }
      },
      "rules": [
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
                {
                  "ref": "Endpoint"
                }
              ]
            }
           ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {
```

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                    "fn": "booleanEquals",
                    "argv": [
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                        "ref": "UseDualStack"
                      },
                      true
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                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
```

```
                    }
                ],
                "assign": "PartitionResult"
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
```

true

```
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
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"fn": "booleanEquals",

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                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
```

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                {
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                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

                ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

    ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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{
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                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                                {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {

                        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

  }
                    ],
```

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                "type": "tree"
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            {
                "conditions": [
                    {
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

         }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
```

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                ],
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                {
                    "conditions": [],
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                    "type": "error"
                }
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            "type": "tree"
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        {
            "conditions": [],
            "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

    "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
```

```
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
```

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                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack":
 false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error":
```

```
"Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
```

```
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
```

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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
         },
         {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
         },
         {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
         },
         {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
         },
         {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
         },
         {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
         }
      ]
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
   "type": "string",
    "traits": {
      "smithy.api#enum": [
         {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
         },
         {
```

```
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n<li>\n<p>Product</p>\n</li>\n<li>\n<p>DirectoryId</p>\n</li>\n</ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
```

```
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n            <li>\n                <p>InstanceId</p>\n
</li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
               "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
```

```
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {

    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
```

```
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/ListUserAssociations"
         },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceUserSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
      "type": "structure",
```

```
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
```

```
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {

           "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
```

```
        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Contains settings for a specific server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "RDS_SAL",
                "value": "RDS_SAL",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Settings": {

      "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                  "min": 1
                },
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
```

```
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },

          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
```

provider. \n   <note>\n
  Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n   </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The user name
 from the identity provider of the user. ",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": " An object that specifies details for the identity provider. ",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n   ",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
              }

```
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
      "smithy.api#http": {
        "method": "PUT",
        "uri": "/tags/{ResourceArn}"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
```

```
            },
            "TagKeys": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                   "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
 {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
  }
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

```
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
```

```
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
```

```
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
```

```
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
```

```
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
```

```
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
```

Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

    {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
```

```
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>The instance type of the resource.</p>"
               }
            },
            "AccountID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
          }
        },
        "SubscriptionProviderCreateTime": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
```

```
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
```

```
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

          }
          ],
          "type": "tree"
        },
        {
          "conditions": [],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {

          "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
```

```
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

},
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
```

```
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [

                                                     {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],

        "rules": [
                                                {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],

                                "type": "tree"
                                        }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
```

```
                                {

            "conditions": [
                                    {
                                       "fn": "booleanEquals",
                                       "argv": [
                                          {
                                             "ref": "UseFIPS"
                                          },
                                          true
                                       ]
                                    }
                                 ],
                                 "rules": [
                                    {
                                       "conditions": [
                                          {

                           "fn": "booleanEquals",
                                             "argv": [
                                                {
                                                   "fn": "getAttr",
                                                   "argv": [
                                                      {
                                                         "ref": "PartitionResult"
                                                      },
                                                      "supportsFIPS"
                                                   ]
                                                },
                                                true

                                          ]
                                          }
                                       ],
                                       "rules": [
                                          {
                                             "conditions": [],
                                             "rules": [
                                                {
                                                   "conditions": [],
                                                   "endpoint": {
                                                      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                      "headers": {}
                                                   },
                                                   "type": "endpoint"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
but this partition does not support FIPS",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true

      ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {

                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }
                  ]
                }
```

```
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [

        {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          }
        ],
```

```
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
```

```
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },

    {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "Missing region",

              "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
```

```
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
            <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
                <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
```

```
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
```

```
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Subscription</code>\n              </p>\n            </li>\n        </ul>\n        <p>The valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
```

```
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
```

```
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

"name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
```

```
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
 Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
             },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
```

```
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
```

```
                "value": "INVALID",
                "documentation": "INVALID status"
              },
              {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
```

```
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
```

```
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
```

```
    "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
 {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
```

```
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }

          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
```

```
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
                }
             }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
```

```
            "smithy.api#error": "client"
          }
        }
      }
    }
}
```

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.116 github.com/aws/aws-sdk-go-v2/internal/v4a 1.4.6

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

```
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
  name: License Scan
```

```
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration
```

```
// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}
```

```
type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
```

```
            "DirectoryId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
               "traits": {
                  "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
               }
            },
            "ActiveDirectorySettings":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
               }
            },
            "ActiveDirectoryType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
         "type": "structure",
         "members": {
            "DomainName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
               }
            },
            "DomainIpv4List": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
               "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 2
                  }
               }
            },
```

```
            "DomainCredentialsProvider": {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
               }
            },
            "DomainNetworkSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
               },
               {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
```

```
{
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
           "smithy.api#http":
{
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
           },
           "smithy.api#idempotent": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
```

```
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
```

```
                "smithy.api#required": {}
              }
            },
             "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoint": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
              "traits": {
                "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
              }
            }
          },
           "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
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provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
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Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
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                },

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
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        "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
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            "LastStatusCheckDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date of the last status check.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
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                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
    }
},
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
   "type": "structure",
   "members": {
      "message": {
         "target": "smithy.api#String"
      }
   },
   "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
   "type": "string",
   "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
   "type": "service",
   "version": "2018-05-10",
   "operations": [
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
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        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

      "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
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            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {
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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },

"properties": {},
                        "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
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                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
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true

```
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
```

"fn": "booleanEquals",

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                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          }
                        ]
                      },
```

```
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

                ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

    ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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{
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                                {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {

                        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

    }
                    ],
```

```
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

        "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]

         }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
```

```
                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

      "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
```

```
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
```

```
                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack":
 false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error":
```

```
"Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
```

```
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
```

```
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
         },
         {
            "name": "PROVISIONING_FAILED",

           "value": "PROVISIONING_FAILED",
            "documentation": ""
         },
         {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
         },
         {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
         },
         {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
         },
         {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
         }
      ]
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
   "type": "string",
    "traits": {
      "smithy.api#enum": [
         {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
         },
         {
```

```
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
              },
              {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
           "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n<li>\n<p>Product</p>\n</li>\n<li>\n<p>DirectoryId</p>\n</li>\n</ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists
the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
```

```
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n          </ul>"
              }
            },
            "NextToken": {
               "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
```

```
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {

    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
```

```
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/ListUserAssociations"
         },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "InstanceUserSummaries"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
      "type": "structure",
```

```
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
```

```
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {

           "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
```

```
        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Contains settings for a specific server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "RDS_SAL",
                "value": "RDS_SAL",
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Settings": {

      "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                  "min": 1
                },
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
```

```
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },

          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
```

provider. \n <note>\n
Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name
from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}

```
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
     },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
      "smithy.api#http": {
        "method": "PUT",
        "uri": "/tags/{ResourceArn}"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
```

```
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
```

```
            },
            "TagKeys": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                   "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings":
 {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - ProductSKU
//
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
```

```
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
```

```
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
```

```
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
```

```
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
```

```
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

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you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region": {
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                   "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                  "type": "Boolean"
                },
                "Endpoint": {
                  "builtIn": "SDK::Endpoint",
                  "required": false,
                  "documentation": "Override the endpoint used to send this request",
                  "type": "String"
                }
              },
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "isSet",
                      "argv": [
                        {
                          "ref": "Endpoint"
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
```

```
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

            ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
```

```
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }

  ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

              },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
                      "rules": [
                        {
                          "conditions": [],
```

```
        "rules": [
                                                {
                                                   "conditions": [],
                                                   "endpoint": {
                                                      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                      "properties": {},
                                                      "headers": {}
                                                   },
                                                   "type": "endpoint"
                                                }
                                             ],

                                    "type": "tree"
                                          }
                                       ],
                                       "type": "tree"
                                    },
                                    {
                                       "conditions": [],
                                       "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                                       "type": "error"
                                    }
                                 ],
                                 "type": "tree"
                              },
                              {

                     "conditions": [
                                    {
                                       "fn": "booleanEquals",
                                       "argv": [
                                          {
                                             "ref": "UseFIPS"
                                          },
                                          true
                                       ]
                                    }
                                 ],
                                 "rules": [
                                    {
                                       "conditions": [
                                          {

                              "fn": "booleanEquals",
                                          "argv": [
                                             {
```

```
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
```

```
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true

                            ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                        "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "rules": [

        {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],
                                            "type": "tree"

                                }
                                    ],
```

```
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
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```
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
           },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
```

```
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },

        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
```

```
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
```

```
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Instances"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
 <li>\n              <p>\n                <code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n
  <p>\n                <code>InstanceType</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
    <code>ProductCode</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>Region</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>Status</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>UsageOperation</code>\n              </p>\n            </li>\n          </ul>\n          <p>For each filter, you can use
 one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n          <ul>\n
    <li>\n              <p>\n                <code>contains</code>\n              </p>\n            </li>\n            <li>\n
 <p>\n                <code>equals</code>\n              </p>\n            </li>\n            <li>\n
```

```
            <p>\n                <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n
<p>The valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
```

```
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken
length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
}
}
}
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "RegisteredSubscriptionProviders"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
```

```
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

             }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
```

```
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {
```

```
    "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
             "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
             "smithy.api#required": {}
           }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
             "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
             "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
              }
            },
            "SubscriptionProviderStatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
              }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "InProgress",
```

```
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
"list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
            "smithy.api#input":
{}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
        }

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
          "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
        }

  },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
           }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization

OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity

```
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
```

```
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
```

spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming

RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer

InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "SELF_MANAGED",
            "value": "SELF_MANAGED",
            "documentation": "SELF_MANAGED type of Active Directory"
          },
          {
            "name": "AWS_MANAGED",
            "value": "AWS_MANAGED",
            "documentation": "AWS_MANAGED type of Active Directory"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
```

```
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
```

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resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
```

```
            "smithy.api#idempotent": {}

        }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                    }
                },
                "InstanceUserArn": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                    "traits": {
                        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                    }
                },
                "Domain": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
```

```
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
```

```
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },

true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

 "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

      "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
```

```
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
```

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        "endpoint":
{
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
```

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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
```

```
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
```

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                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
```

```
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
```

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            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Product</p>\n          </li>\n          <li>\n            <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
```

```
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
```

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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
             "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

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                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
 "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for this product
```

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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
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            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
```

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
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        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

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            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http":
{
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
```

```
        },
        "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
    <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
```

```
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - Beneficiary
//
//   - ProductSKU
//
//   - Fingerprint
//
//   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
```

```
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}
```

```
type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options)) (*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}
```

```
type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
```

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
```

```
    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
              }
            },
            "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
```

```
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
```

```
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
```

```
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
```

```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {

    "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
```

```
                                        "argv": [

                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
```

```
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

                    "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            },
                                            true

                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"
                                    }
                                ],
                                "type": "tree"
```

```
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true

          ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {

                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
```

```
        {
                                                "conditions": [],
                                                "endpoint": {
                                                   "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                   "properties": {},
                                                   "headers": {}
                                                },
                                                "type": "endpoint"
                                             }
                                          ],
                                          "type": "tree"

                                    }
                                       ],
                                       "type": "tree"
                                    },
                                    {
                                       "conditions": [],
                                       "error": "DualStack is enabled but this partition does not support DualStack",
                                       "type": "error"
                                    }
                                 ],
                                 "type": "tree"
                              },
                              {
                                 "conditions": [],
                                 "rules": [
                                    {
                                       "conditions": [],
                                       "endpoint": {
                                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                          "properties": {},
                                          "headers": {}
                                       },
                                       "type": "endpoint"
                                    }
                                 ],
                                 "type": "tree"
                              }
                           ],
                           "type": "tree"
                        }
                     ],
                     "type": "tree"
                  },
                  {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
```

```
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },

    {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {

      "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "Missing region",
```

```
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
                }
            ],
            "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
```

```
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
          "type": "structure",
          "members": {
            "Instances": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
              "traits": {
```

```
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
 objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                  }
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
            "type": "structure",
            "members": {
              "Subscriptions": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
```

```
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
```

```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
```

```
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {

                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
```

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            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
```

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
```

```
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
```

```
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

   "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
{}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
              }

    },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
              }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
          }
      }
  }
```

}

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.118 github.com/aws/aws-sdk-go-v2/internal/endpoints/v2 2.7.6

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer

```
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
```

```
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus
```

```
// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
```

```
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
```

```
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
 OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
          }
        },
        "DomainIpv4List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 2
            }
          }
        },
        "DomainCredentialsProvider": {
          "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
          }
        },
        "DomainNetworkSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
```

```
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
```

```
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
```

<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": " The tags that apply for the license server endpoint. "
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
      "type": "union",
      "members": {
        "SecretsManagerCredentialsProvider":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
```

```
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
```

```
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

    "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
```

```
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
              }
            },
             "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
```

```
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
```

```
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
```

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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

  "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
```

```
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
```

```
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                  "headers": {}
                },
                "type": "endpoint"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
```

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
                            },

true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "rules": [
                          {
```

```
                "conditions": [
                    {

  "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

            ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
```

```
    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

{
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
```

```
                "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"

}
        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "rules": [
          {

    "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
```

```
        }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

                        ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
```

```
                "type": "error"
              }
            ]
          },
          "smithy.rules#endpointTests": {
            "testCases": [
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",

      "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
```

```
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
```

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      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
```

```
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
```

```
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                      "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                     }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
      "type": "structure",
      "members": {
        "ProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
          "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
          }
        },
        "HealthStatus": {
          "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
          "traits": {
            "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
          }
        },
        "Ipv4Address": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>"
          }
        },
        "ServerEndpoint": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
          "type": "string"
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
              },
              {
                "name": "PROVISIONING_FAILED",

               "value": "PROVISIONING_FAILED",
                "documentation": ""
              },
              {
                "name": "PROVISIONED",
                "value": "PROVISIONED",
                "documentation": ""
              },
              {
                "name": "DELETING",
                "value": "DELETING",
                "documentation": ""
              },
              {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""
              },
              {
                "name": "DELETED",
```

```
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
```

```
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
```

```
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "IdentityProviderSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>Product</p>\n            </li>\n            <li>\n               <p>DirectoryId</p>\n
</li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
```

```
                "smithy.api#required": {}
              }
            },
             "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
```

```
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "NextToken":
 {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>Status</p>\n            </li>\n            <li>\n               <p>InstanceId</p>\n
</li>\n         </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
```

```
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
             "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

   "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
      "smithy.api#http": {
        "method": "GET",
        "uri": "/tags/{ResourceArn}"
       },
      "smithy.api#readonly": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
          "smithy.api#httpLabel": {},
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
```

```
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
            },
```

```
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {
```

```
        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
```

```
  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
   <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

         "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
 {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Tags": {
          "type": "map",
          "key": {
```

```
            "target": "smithy.api#String"
          },
          "value": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{ResourceArn}"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
    },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
         "type": "structure",
          "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings":
 {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
```

```
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                "smithy.api#required":
{}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
```

```
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
```

```
 params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
```

```
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
 Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
```

```
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
```

```
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
```

```
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string
```

```
 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
```

```
//
// Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
// trials.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
 OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
```

```
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
            "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetRegisteredSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
```

```
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
          }
        },
        "InstanceID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
          }
        },
        "InstanceType": {
```

```
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
```

```
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
```

```
        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
              "conditions": [],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                  ],
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "endpoint": {
                    "url": {
                      "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"

          }
          ],
          "type": "tree"
        },
        {
          "conditions": [],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                       "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

    ],
                    "rules": [
                      {
                        "conditions": [
```

```
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [
                                                {
                                                  "ref": "PartitionResult"

                    },
                                                "supportsFIPS"
                                              ]
                                            }
                                          ]
                                        },
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [

                                               {
                                                  "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                              ]
                                            }
                                          ]
                                        }
                                      ],
                                      "rules": [
                                        {
                                          "conditions": [],

        "rules": [
                                            {
                                              "conditions": [],
                                              "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                              },
                                              "type": "endpoint"
                                            }
```

```
                                ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {

                "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
                                            ]
                                        },
                                        true
```

```
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
 but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
                        {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {

                          "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [

        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"

                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
```

```
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
                }
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
```

```
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                      }

                   },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {

  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                      }
                    },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
```

```
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },

    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
```

```
      "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "For custom endpoint with fips disabled and dualstack enabled",
               "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
               },
               "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
               }
            },
            {
               "documentation": "Missing region",

            "expect": {
                  "error": "Invalid Configuration: Missing Region"
               }
            }
         ],
         "version": "1.0"
      }
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
   "type": "string",
   "traits": {
      "smithy.api#enum": [
         {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
         },
         {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
         }
      ]
   }
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
```

```
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Instances"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n           <li>\n              <p>\n                 <code>AccountID</code>\n
</p>\n           </li>\n           <li>\n              <p>\n                 <code>AmiID</code>\n              </p>\n           </li>\n
        <li>\n              <p>\n                 <code>DualSubscription</code>\n              </p>\n           </li>\n
<li>\n              <p>\n                 <code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n
  <p>\n                 <code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
    <code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n              <p>\n                 <code>contains</code>\n              </p>\n           </li>\n           <li>\n
<p>\n                 <code>equals</code>\n              </p>\n           </li>\n           <li>\n
              <p>\n                 <code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
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            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Subscriptions"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
```

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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "Subscriptions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
         "type": "operation",
         "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
         },
         "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
         },
```

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        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
               }
            }
         },

         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
         "type": "structure",
         "members": {
            "RegisteredSubscriptionProviders": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
               "traits": {
                  "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
               "method": "GET",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
         "type": "structure",
         "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}

               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
         "type": "structure",
         "members": {
            "tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {

"name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled OrganizationIntegration"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
```

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      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
```

```
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
             "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
```

```
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
       },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
```

```
            "Type": {
              "target": "smithy.api#String",
              "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
              }
            },
            "InstanceCount": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
          "type": "list",

         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
```

```
        "type":
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                 "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key":
{
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
               "method": "DELETE",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
         "type": "structure",

    "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {
                  "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input":
 {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

```
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.119 github.com/aws/aws-sdk-go-v2/service/internal/s3shared 1.19.6

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

```
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
```

```
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
```

```
        with:
          path: sdkbase
          ref: ${{ github.base_ref }}
      - name: Checkout this ref
        uses: actions/checkout@v2
        with:
          path: new-ref
          fetch-depth: 0
      - name: Get Diff
        run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
      - name: Get Target Files
        run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
      - name: Checkout scancode
        uses: actions/checkout@v2
        with:
          repository: nexB/scancode-toolkit
          path: scancode-toolkit
          fetch-depth: 1
      - name: Set up Python ${{ matrix.python-version }}
         uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
```

```
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
```

```
            },
            "ActiveDirectorySettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
```

contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
             "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/DeleteLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

      "smithy.api#required": {}
              }
            }
          },
```

```
      "traits": {
        "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
        "Value": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
           "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
```

```
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
```

```
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
   "type": "structure",
   "members": {
      "message": {
         "target": "smithy.api#String"
      }
   },
   "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
   "type": "string",
   "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
   "type": "service",
   "version": "2018-05-10",
   "operations": [
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
      },
      {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
```

```
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id",
                "content-length",

            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
              ],
              "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
              ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region":
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                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                  "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
```

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      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
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          "argv": [
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              "ref": "Endpoint"
            }
          ]
        }
      ],
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              "fn": "booleanEquals",
              "argv": [
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                },
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          "type": "error"
        },
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              "argv": [
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                },
                true
              ]
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                }
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              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
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                  "ref": "Endpoint"
                },

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              "type": "endpoint"
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        },
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          "conditions": [
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              "argv": [
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                  "ref": "Region"
                }
              ]
            }
          ],
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                  "argv": [
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                    }
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                  "assign": "PartitionResult"
                }
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              "rules": [
                {
                  "conditions": [
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                    },

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                  "argv": [
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                    },
                    true
                  ]
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                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        }
                      ]
                    },

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                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [
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                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }

                ]
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                ],
                "rules": [
                    {
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                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
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                    },
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{
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                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
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                    "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
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                      "headers": {}
                    },
                    "type": "endpoint"
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                "type": "tree"
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              {
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                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
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          {
            "conditions": [
              {
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                "argv": [
                  {
                    "ref": "UseDualStack"
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```
                    },
                    true
                ]
            }
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            {

    "conditions": [
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                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

     }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ],
        "type": "tree"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
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              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
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        "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint":
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                    "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
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                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS":
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                  "UseDualStack": true
                }
```

```
    },
    {
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      "expect": {
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          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
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        "UseFIPS": false,
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    },
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        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
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      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
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      "params": {
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        "UseDualStack": true
      }
    },
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        }
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        "UseFIPS": true,
        "UseDualStack": false
      }
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      "expect": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
```

```
      "expect": {
        "endpoint":
{
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        }
      },
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        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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{
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        }
      },
      "params": {
        "Region": "us-isob-east-1",
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            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
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```
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
              },
              "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
              }
            },
            "traits": {
```

```
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
```

```
            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "PROVISIONING",
                  "value": "PROVISIONING",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONING_FAILED",
```

```
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                  "smithy.api#required": {}
               }
            },
             "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
              }
            },
            "NextToken":
```

```
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n <ul>\n <li>\n <p>Status</p>\n </li>\n <li>\n <p>InstanceId</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "LicenseServerEndpoints"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
```

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                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n  <li>\n    <p>IdentityProviderArn</p>\n  </li>\n</ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListProductSubscriptions"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

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"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",

    "members": {
        "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
        "smithy.api#http": {
            "method": "GET",
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            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
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            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

   },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListUserAssociations"
             },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
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empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

             "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
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            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
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                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

         "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
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                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
```

```
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
```

resources\n\t\t\tin the VPC. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n   <note>\n
  Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n   </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
 for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
           "traits": {
             "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
             "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

       "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
          "smithy.api#error": "client"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

      },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
         "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
```

```
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings":
 {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
      <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n               <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n         </ul>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
 {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required":
{}
          }
        },
        "RemoveSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A parameter is not valid.</p>",
        "smithy.api#error": "client"
      }
    }
  }
}
```

DeleteLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization

```
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
```

```
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

```
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:
      region,
 ServiceID:     ServiceID,
 OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string
```

```
// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData
```

```
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
```

```
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
```

```
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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```
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
```

```
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
```

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            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

        },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",
```

```
   "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
               "traits": {
                  "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
               }
            },
            "LastUpdatedTime": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
               }
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
```

```
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
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    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
       "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
```

```
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                  },
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": {
                        "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
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    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
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                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
```

```
                "ref": "UseFIPS"
                    },
                    true
                ]
                },
                {
                "fn": "booleanEquals",
                "argv": [
                    {
                    "ref": "UseDualStack"
                    },
                    true
                ]
                }

    ],
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                {
                    "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                            {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                            ]
                        }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [

                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
```

```
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
```

```
                ],
                "rules": [
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                    "conditions": [
                      {

                "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          },
                          true

                      ]
                    }
                  ],
                  "rules": [
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                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
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                  "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
```

```
                }
            ],
            "type": "tree"
        },
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            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
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            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

{
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
```

```
                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
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                        "conditions": [],
                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
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    }
],
"type": "tree"
```

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      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
```

```
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                    }

            },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                    }
                 },
                "params": {
```

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            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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      "expect": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
```

```
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

        "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "Missing region",

          "expect": {
              "error": "Invalid Configuration: Missing Region"
            }
          }
        ],
        "version": "1.0"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
```

\n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
objects. "
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
" Lists the Linux subscriptions that have been discovered. If you have linked your\n   organization, the returned results will include data aggregated across your accounts in\n   Organizations. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
```

```
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
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the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
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        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
```

```
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
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            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

              "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
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```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
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\n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-

```
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

```
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
```

```
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
{}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required":
{}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

from. "
            }

    },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
            }
        },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n   subscriptions. "
            }
         }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " The provided input is not valid. Try your request again. ",
        "smithy.api#error": "client"
      }
    }
  }
}

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning

Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.120 aws-sdk-go-v2-internal-endpoints 2.7.6

1.120.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

```
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
   matrix:
    python-version: [3.9]

  steps:
   - name: Checkout target
    uses: actions/checkout@v2
    with:
     path: sdkbase
     ref: ${{ github.base_ref }}
   - name: Checkout this ref
    uses: actions/checkout@v2
    with:
```

```
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
```

```
 params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
```

```
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
 Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
```

```
            },
            "ActiveDirectoryType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
         "type": "structure",
         "members": {
            "DomainName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
               }
            },
            "DomainIpv4List": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
               "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 2
                  }
               }
            },
            "DomainCredentialsProvider": {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
               }
            },
            "DomainNetworkSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
               }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

    "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
```

```
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

       {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
```

```
            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
```

```
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
```

```
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
```

```
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

      "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
```

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                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
```

```
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

           "x-api-key",
              "authorization",
              "x-amz-date",
```

```
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
```

```
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [
          {

            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "endpoint": {
          "url": {
```

```
                        "ref": "Endpoint"
                    },

        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "aws.partition",

                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },

true
                                    ]
```

```
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

"fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },

                    {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }

            ]
                        }
                    ],
```

```
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
```

```
                {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "endpoint": {

    "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"

}
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
```

```
        "conditions": [
                                {
                                   "fn": "booleanEquals",
                                   "argv": [
                                      true,
                                      {
                                         "fn": "getAttr",
                                         "argv": [
                                            {
                                               "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                         ]

        }
                                   ]
                                }
                             ],
                             "rules": [
                                {
                                   "conditions": [],
                                   "endpoint": {
                                      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                      "properties": {},
                                      "headers": {}
                                   },
                                   "type": "endpoint"
                                }

                          ],
                                "type": "tree"
                             },
                             {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                             }
                          ],
                          "type": "tree"
                       },
                       {
                          "conditions": [],
                          "endpoint": {
                             "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
                "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
              ],
              "type": "tree"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [],
          "error": "Invalid Configuration: Missing Region",
          "type": "error"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect":
{
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

    "UseFIPS": true,
            "UseDualStack": false
          }
        },
```

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                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS":
 true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
```

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      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
```

```
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
```

```
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
      "ProvisioningStatus": {
        "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
        "traits": {
          "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
        }
      },
      "HealthStatus": {
        "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
        "traits": {
          "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
        }
      },
      "Ipv4Address": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
```

```
        "IdentityProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>"
          }
        },
        "ServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
          }
        },
        "LicenseServerEndpointId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
          }
        },
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
          }
        },
        "LicenseServerEndpointProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
           "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
          }
```

```
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
               }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "PROVISIONING",
                  "value": "PROVISIONING",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONING_FAILED",

                 "value": "PROVISIONING_FAILED",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONED",
                  "value": "PROVISIONED",
```

```
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
                }
            },
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n       </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to register.</p>",
                "smithy.api#required": {}
            }
        },

    "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",

        "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
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            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
   <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
                "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                  "smithy.api#required": {}
                }
              }
            },
            "traits": {
              "smithy.api#output": {}
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
            },
            "output": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
              },
              {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
              },
              {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
              },
              {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
              },
              {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
              },
              {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
              },
              {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
              "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
       "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
```

```
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
```

```
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
```

```
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
```

```
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
```

```
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,

```
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
```

InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
```

```
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

        "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
```

```
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
```

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
```

```
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
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```
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
      },
      {
        "conditions": [],
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {

            "fn": "aws.partition",
                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                       "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
```

```
                                        "ref": "PartitionResult"

                    },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                     {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
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                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {

      "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {

            "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          },
                          true

                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
```

```
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

```
                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
```

```
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ],
 "type": "tree"
 }
 ]
},
"smithy.rules#endpointTests": {
 "testCases": [
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

 }
   },
   "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
   }
  },
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
    }
   },
   "params": {
    "Region": "us-east-1",
```

```
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

    },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
```

```
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                      }
                     },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {

 "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

        },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
          },
          "params": {
            "Region": "us-isob-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },

    {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {

      "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
```

```
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",

                  "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "Enabled",
                  "value": "Enabled",
                  "documentation": "Enabled LinuxSubscriptionsDiscovery"
                },
                {
                  "name": "Disabled",
                  "value": "Disabled",
                  "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
            "type": "structure",
            "members": {
              "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional
  objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
```

```
"<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
```

```
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"

              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
 return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
 nextToken from a previously truncated response.</p>"
              }
            }
          },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "EQUAL",
                "value": "Equal",
```

```
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
```

```
          "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
      "type": "list",
      "member": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
               },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
```

```
            },
            "InstanceCount": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
         "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "RedHat",
                  "value": "RedHat",
                  "documentation": "RedHat subscription provider namespace"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
```

```
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
```

```
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
```

```
Region.</p>"
                }
            }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

    },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization

OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.121 github.com/aws/aws-sdk-go-v2/service/internal/presigned-url 1.13.6

1.121.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
```

This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

```
 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
```

```
            },
            "ActiveDirectoryType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
         "type": "structure",
         "members": {
            "DomainName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
               }
            },
            "DomainIpv4List": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
               "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 2
                  }
               }
            },
            "DomainCredentialsProvider": {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
               }
            },
            "DomainNetworkSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
               }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

    "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
```

```
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
```

```
            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
```

```
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
```

```
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
```

```
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

      "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
```

```
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

         "x-api-key",
              "authorization",
              "x-amz-date",
```

```
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
```

```
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [
          {

            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "endpoint": {
          "url": {
```

```
                        "ref": "Endpoint"
                    },

    "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "aws.partition",

                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },

true
                                    ]
```

```
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

"fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },

                    {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }

            ]
                        }
                    ],
```

```
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
```

```
                {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "endpoint": {

    "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"

}
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
```

```
        "conditions": [
                                {
                                   "fn": "booleanEquals",
                                   "argv": [
                                      true,
                                      {
                                         "fn": "getAttr",
                                         "argv": [
                                            {
                                               "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                         ]

        }
                                   ]
                                }
                             ],
                             "rules": [
                                {
                                   "conditions": [],
                                   "endpoint": {
                                      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                      "properties": {},
                                      "headers": {}
                                   },
                                   "type": "endpoint"
                                }

                          ],
                                "type": "tree"
                             },
                             {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                             }
                          ],
                          "type": "tree"
                       },
                       {
                          "conditions": [],
                          "endpoint": {
                             "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
                "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
              ],
              "type": "tree"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [],
          "error": "Invalid Configuration: Missing Region",
          "type": "error"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect":
{
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

    "UseFIPS": true,
            "UseDualStack": false
          }
        },
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                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS":
 true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
```

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      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
```

```
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
 disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
```

```
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
      "ProvisioningStatus": {
        "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
        "traits": {
          "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
        }
      },
      "HealthStatus": {
        "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
        "traits": {
          "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
        }
      },
      "Ipv4Address": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
```

```
        "IdentityProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>"
          }
        },
        "ServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
          }
        },
        "LicenseServerEndpointId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
          }
        },
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
          }
        },
        "LicenseServerEndpointProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
           "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
          }
```

```
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
               }
            },
            "CreationTime": {
               "target": "smithy.api#Timestamp",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
         "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "PROVISIONING",
                  "value": "PROVISIONING",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONING_FAILED",

                 "value": "PROVISIONING_FAILED",
                  "documentation": ""
               },
               {
                  "name": "PROVISIONED",
                  "value": "PROVISIONED",
```

```
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
       "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
               }
            },
            "NextToken":
 {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
               }
            },
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n       </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

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        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

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            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

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    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
       }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to register.</p>",
                "smithy.api#required": {}
            }
        },

    "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",

        "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
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            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
   <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
       "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

```
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
                }
            },
            "UpdateSettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
 {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
 {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
```

```
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
```

```
//
the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
```

```
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE

```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:
   ServiceID,
 OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
 Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
```

CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
```

```
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

       "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
```

```
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/GetServiceSettings"

          },
            "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
```

```
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
```

```
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
          }
        },
        "SubscriptionName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
          }
        },
        "OsVersion": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
          }
        },
        "SubscriptionProviderCreateTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
          }
        },
        "SubscriptionProviderUpdateTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
          }
        },
        "DualSubscription": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
          }
```

```
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
```

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
       },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
```

```
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
```

```
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
```

```
            "type": "tree"

        }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
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            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                      "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
```

```
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
                  },
                  true
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  ],
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                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

              },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
                      "rules": [
                        {
```

```
                "conditions": [],

        "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],

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                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {

        "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                        "ref": "UseFIPS"
                    },
                    true
                ]
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        ],
        "rules": [
            {
                "conditions": [
                    {
```

```
                "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
 but this partition does not support FIPS",
              "type": "error"
            }
          ],
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        },
        {
          "conditions": [
```

```
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true

                                ]
                                    }
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                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
                                                        "argv": [
                                                            {

                                                                "ref": "PartitionResult"
                                                            },
                                                            "supportsDualStack"
                                                        ]
                                                    }
                                                ]
                                            }
                                        ],
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                                            {
                                                "conditions": [],
                                                "rules": [

        {
                                                        "conditions": [],
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                                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                            "properties": {},
                                                            "headers": {}
                                                        },
                                                        "type": "endpoint"
                                                    }
                                                ],
                                                "type": "tree"
```

```
                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
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                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
```

```
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
```

```
    },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
         },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
```

```
                {
                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
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                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                    }

                 },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
```

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      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

```
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                      }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },

          {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
```

```
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled LinuxSubscriptionsDiscovery"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
 </p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
 <li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
 <code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
```

```
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
   <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
          <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListLinuxSubscriptions"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "Subscriptions"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

```
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n
<p>The valid Operators for this filter are:</p>\n        <ul>\n        <li>\n            <p>\n
<code>contains</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
<code>equals</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
        <code>Notequal</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

```
    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
         },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
```

```
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
              },
              {

        "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
```

```
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
         "type": "structure",
         "members": {
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
               "traits": {
                  "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
```

```
    "traits": {
        "smithy.api#enum": [
            {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
```

```
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {

       "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

       "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
"list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
```

```
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
```

```
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
```

```
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
          "type": "structure",

       "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input":
{}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
```

```
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }

      },
          "Status": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing

InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.122 github.com/aws/aws-sdk-go-v2/config 1.31.6

1.122.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop

```
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
```

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
```

```
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning

Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
```

```
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
          }
        },
        "DomainIpv4List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 2
            }
          }
        },
        "DomainCredentialsProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
          "traits": {
            "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
          }
        },
        "DomainNetworkSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
```

```
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
```

```
            "message": {
                "target": "smithy.api#String"
             }
          },
          "traits": {
             "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
             "smithy.api#error": "server"
          }
       },
       "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
             "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
             "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
             },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
          ],
          "traits": {
             "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
             "smithy.api#http": {
                "code": 200,
                "method": "POST",
```

```
            "uri": "/license-server/CreateLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
```

```
            },
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
         "type": "union",
         "members": {
            "SecretsManagerCredentialsProvider":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
          },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
```

```
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
```

```
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}

}
  },
  "com.amazonaws.licensemanagerusersubscriptions#Directory": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
```

```
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
```

```
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
```

```
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                 }
            },
```

```
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

         "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
```

```
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
```

```
"conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Endpoint"
        }
      ]
    }
  ],
"rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [
        {

          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
```

```
        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "aws.partition",

                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },

true
                                    ]
                                },
                                {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
```

```
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

    ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [

 {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [

                    {
                                                        "ref": "PartitionResult"
                                                    },
```

```
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {

      "conditions": [
                        {
                            "fn": "booleanEquals",
```

```
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]

        }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

                        ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
```

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                        }
                      ],
                      "type": "tree"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "Invalid Configuration: Missing Region",
                  "type": "error"
                }
              ]
            },
            "smithy.rules#endpointTests": {
              "testCases": [
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                  "expect":
{
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",

        "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
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                "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
 true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
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{
                    "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
```

```
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
       "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint":
{
        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
```

```
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
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                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "smithy.api#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
        },
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
```

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            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
```

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            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
```

```
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
```

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      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
               }
            },
            "NextToken":
 {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
          "type": "structure",
           "members": {
            "InstanceSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output":
 {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
          },
          "NextToken": {
             "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListProductSubscriptions"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "ProductUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
```

| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",

"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
               "method": "GET",
               "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
         "type": "structure",
         "members": {
            "ResourceArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

  },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
```

```
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target":
 "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
```

```
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

           "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
                }
              }
          },
          "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
```

```
                "smithy.api#required": {}
            }
        },

    "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 404
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",

      "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
```

```
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
```

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
```

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 from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}

                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
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```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
              }
            },
            "ProductUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
              }
             }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
          "type": "structure",
          "members": {
```

```
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
          }
```

```
            },
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
      <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n               <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n         </ul>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
         "type": "structure",
         "members": {
            "AddSubnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
```

```
                "smithy.api#required":
 {}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
```

```
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
```

```
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
```

```
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
```

```
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
```

```
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
```

```
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
```

```
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
```

```
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata

```
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

    {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
```

```
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
```

```
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
```

```
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
```

```
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
      },
      "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
      "smithy.api#title": "AWS License Manager Linux Subscriptions",
      "smithy.rules#endpointRuleSet": {
        "version": "1.0",
        "parameters": {
          "Region": {
            "builtIn": "AWS::Region",
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
```

```
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                        },
                        true
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
```

```
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

},
                          "supportsFIPS"
                        ]
                      }
```

```
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [

                     {
                          "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],

      "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],

            "type": "tree"
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                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                "type": "error"
              }
            ],
```

```
                "type": "tree"
            },
            {

        "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

                "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
```

```
                                    },
                                    "type": "endpoint"
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                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],
                "rules": [

        {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"

                }
                    ],
                    "type": "tree"
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ],
          "type": "tree"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

      }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
```

```
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                  }

        },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {

          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                  }
                },
```

```
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
```

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      "expect": {
        "endpoint": {
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        }

      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

      },
      "params": {
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            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },

    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {

  "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
```

```
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",

                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Instances"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
```

```
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
            <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
      "type": "structure",
      "members": {
        "Instances": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListLinuxSubscriptions"
        },
```

```
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Subscriptions"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken
```

```
length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
```

```
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
```

```
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

```
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },

            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {

                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
```

```
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
 subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
 Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
```

```
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
               }
            },
             "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
         "type": "structure",
```

```
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "InProgress",
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {

          "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n        Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n        Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

     "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
```

```
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
               "method": "PUT",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
         "type": "structure",
         "members": {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                   "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
         "type": "map",
         "key":
{
            "target": "smithy.api#String"
         },
         "value": {
```

```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",

  "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tagKeys": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input":
{}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
          }

    },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
         }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.123 github.com/aws/aws-sdk-go-v2/feature/s3/manager 1.19.4

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd

Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
```

```
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
```

```
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
```

Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
```

```
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
```

```
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
```

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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
```

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resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
```

```
            "smithy.api#idempotent": {}

        }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                    }
                },
                "InstanceUserArn": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                    "traits": {
                        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                    }
                },
                "Domain": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
```

```
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
```

```
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
```

true

```
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

 "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {

                "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

}
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
```

```
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
```

```
        "endpoint":
{
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
```

```
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
```

```
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
```

```
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Product</p>\n          </li>\n          <li>\n            <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "LicenseServerEndpoints"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
```

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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
```

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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
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                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"


        }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
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            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
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        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
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            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StartProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http":
{
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
```

```
        },
        "UpdateSettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
    <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
          "AddSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required":
{}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
```

Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
```

```
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
```

```
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
```

```
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
```

```
    // This member is required.
    DigitalSignatureMethod types.DigitalSignatureMethod

    // License entitlements. Partial checkouts are not supported.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Amazon Resource Name (ARN) of the license. The license must use the borrow
    // consumption configuration.
    //
    // This member is required.
    LicenseArn *string

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Allowed license entitlements.
    EntitlementsAllowed
    []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the license.
    LicenseArn *string

    // License consumption token.
    LicenseConsumptionToken *string

    // Node ID.
    NodeId *string

    // Signed token.
```

```
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
```

```
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
```

```
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
               "smithy.api#required": {}
             }
           }
         },
         "traits": {
           "smithy.api#input": {}
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
         "type": "structure",
         "members": {},
         "traits": {
           "smithy.api#output": {}
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
         "type": "structure",
         "members": {
           "Name": {
             "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The type of name to filter by.</p>"
              }
           },
           "Values": {
             "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
             }
           },
           "Operator": {
             "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
             "traits": {
               "smithy.api#documentation": "<p>An operator for filtering results.</p>"
             }
           }
         },
         "traits": {
           "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
         "type":
```

```
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

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            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
          "type": "structure",
          "members": {
            "AmiId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
              }
            },
            "InstanceID": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
```

```
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
```

```
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
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            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

```
                        true
                    ]
                }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
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                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
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                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
```

```
  {
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        "argv": [
          {
            "ref": "Region"
          }
        ]
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    ],
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        "conditions": [
          {

"fn": "aws.partition",
            "argv": [
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                "ref": "Region"
              }
            ],
            "assign": "PartitionResult"
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {

                "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
```

```
],
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                                              true,
                                              {
                                                "fn": "getAttr",
                                                "argv": [
                                                  {
                                                    "ref": "PartitionResult"

                                },
                                                  "supportsFIPS"
                                                ]
                                              }
                                            ]
                                          },
                                          {
                                            "fn": "booleanEquals",
                                            "argv": [
                                              true,
                                              {
                                                "fn": "getAttr",
                                                "argv": [

                                                 {
                                                    "ref": "PartitionResult"
                                                  },
                                                  "supportsDualStack"
                                                ]
                                              }
                                            ]
                                          }
                                        ],
                                        "rules": [
                                          {
                                            "conditions": [],

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                                              {
                                                "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                  "properties": {},
```

```
                "headers": {}
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              "type": "endpoint"
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          ],

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        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

        "type": "error"
      }
    ],
    "type": "tree"
  },
  {

  "conditions": [
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        "fn": "booleanEquals",
        "argv": [
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            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "rules": [
      {
        "conditions": [
          {

    "fn": "booleanEquals",
            "argv": [
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
```

```
                                        },
                                        true

                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
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                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
but this partition does not support FIPS",
                            "type": "error"
                        }
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                    "type": "tree"
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                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
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```

```
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                        "conditions": [
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                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [

        {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
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                                "type": "tree"

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                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
```

```
                                ],
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                                "conditions": [],
                                "rules": [
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
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            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
```

```
        }
      },
      {

  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

       },
        "params": {
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          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
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            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
```

```
            "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
          }
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        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }

      },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },

    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
```

```
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
            <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
 <li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
 <code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
 one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
 <p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
         "members": {
            "Instances": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
         },
         "errors": [
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Subscriptions"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
```

```
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
```

```
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
              }
            }
          },

          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
          "type": "structure",
          "members": {
            "RegisteredSubscriptionProviders": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
              "traits": {
                "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
```

```
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
             },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {

"name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
        "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

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            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
         },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
```

```
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n       Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n       Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",

       "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
"list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

  "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input":
 {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {

 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required":
{}
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
              }
            }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }

      },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }
```

```
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         },
         "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
            "type": "structure",
            "members": {
               "message": {
                  "target": "smithy.api#String"
               }
            },
            "traits": {
               "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
               "smithy.api#error": "client"
            }
         }
      }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
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Finalize stack step
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InterceptAttempt
RetryMetricsHeader
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GetIdentity
ResolveEndpointV2
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ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
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CloseResponseBody
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RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
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RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step

spanInitializeStart
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legacyEndpointContextSetter
SetLogger
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setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

InterceptTransmit

1.124 aws-sdk-go-v2-service-sts 1.38.2

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
```

```
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string
```

```
 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
```

ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd

Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
```

```
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
```

```
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n         <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
                }
            },
```

```
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

       {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
    "type": "union",
```

```
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoint": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
               "traits": {
                  "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
               }
            }
         },
          "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
     },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
                  "min": 1
                },

    "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Filter": {
          "type": "structure",
          "members": {
            "Attribute": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
              }
            },
            "Operation": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
              }
            },
            "Value": {
              "target": "smithy.api#String",
              "traits":
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
              }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
```

```
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
  },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

             "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
```

```
                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
                    "type": "String"
                }
            },
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Endpoint"
                                }
                            ]
                        }
                     ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

```
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
```

```
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "aws.partition",

                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },

true
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
```

```
  "fn": "booleanEquals",
                                        "argv": [
                                          true,
                                          {
                                            "fn": "getAttr",
                                            "argv": [
                                              {
                                                "ref": "PartitionResult"
                                              },
                                              "supportsFIPS"
                                            ]
                                          }
                                        ]
                                      },

                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                          true,
                                          {
                                            "fn": "getAttr",
                                            "argv": [
                                              {
                                                "ref": "PartitionResult"
                                              },
                                              "supportsDualStack"
                                            ]
                                          }

                                ]
                                    }
                                  ],
                                  "rules": [
                                    {
                                      "conditions": [],
                                      "endpoint": {
                                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                      },
                                      "type": "endpoint"
                                    }

    ],
                                  "type": "tree"
                                },
                                {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [

 {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [

{
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
```

```
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

    "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

    }
                            ]
                        }
```

```
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }

                                ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                        "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
```

```
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
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{
                    "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
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            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
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            "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
           "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
```

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    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
 false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
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                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                 }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
```

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            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
            },
            "HealthStatus": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
```

\n\t\t\taddress of the RDS license server endpoint. "
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": " The ID of the license server endpoint. "
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
              "smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
            }
          }
        },
        "traits": {

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            "smithy.api#documentation":
"<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",

                  "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
```

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            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
```

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
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                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                    "smithy.api#required": {}
                }
            },
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            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
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            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
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            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

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        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                 "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
```

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request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                 "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

     "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
```

```
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
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            "uri": "/user/ListUserAssociations"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
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```
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
 "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {

           "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
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            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a product for this user.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductUserArn": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
          }
        },
        "SubscriptionStartDate": {
          "target": "smithy.api#String",
          "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
          }
        },
        "SubscriptionEndDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The end date of a subscription.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },

      "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
{
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
```

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      "traits": {
        "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 404
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",

      "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

     "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
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servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {

    "type": "structure",
        "members": {
          "Subnets": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },

        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
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<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

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        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
          "smithy.api#http":
 {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
```

```
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
```

```
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
             "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
            },
            "UpdateSettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n            <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
```

\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required":
{}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

DeleteLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization

```
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
```

```
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

```
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:
      region,
 ServiceID:     ServiceID,
 OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string
```

```
// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData
```

```
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
```

```
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
```

```
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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```
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
```

```
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",
```

```
   "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
               "traits": {
                  "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
               }
            },
            "LastUpdatedTime": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
               }
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
```

```
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
         "type": "service",
         "version": "2018-05-10",
         "operations": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
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    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
       "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
```

```
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                  },
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": {
                        "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
```

```
                "ref": "UseFIPS"
                    },
                    true
                ]
                },
                {
                "fn": "booleanEquals",
                "argv": [
                    {
                    "ref": "UseDualStack"
                    },
                    true
                ]
                }

    ],
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                {
                    "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                            {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                            ]
                        }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [

                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
```

```
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {

                "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          },
                          true

                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
```

```
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

{
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
```

```
                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
```

```
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                    }

            },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                    }
                 },
                "params": {
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            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
```

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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
```

```
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

        "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "Missing region",

          "expect": {
              "error": "Invalid Configuration: Missing Region"
            }
          }
        ],
        "version": "1.0"
```

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            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
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        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
```

\n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield

isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

          "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
```

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            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
```

```
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
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the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
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        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
```

```
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
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```
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {

            "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
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```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
```

\n\t\t\tthis is the status of the offline token. "
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-

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\\.]{0,63}:secret:[^/]{1,1023}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
              "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
```

```
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
               "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required":
{}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

from. "
            }

    },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
            }
        },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n   subscriptions. "
            }
         }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " The provided input is not valid. Try your request again. ",
        "smithy.api#error": "client"
      }
    }
  }
}

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
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InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
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InterceptAfterSigning
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OperationSerializer
InterceptAfterSerialization
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disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.125 github.com/aws/aws-sdk-go-v2/service/internal/endpoint-discovery 1.11.6

1.125.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection

```
 spanBuildRequestEnd
Finalize stack step
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 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
   matrix:
    python-version: [3.9]

  steps:
   - name: Checkout target
    uses: actions/checkout@v2
    with:
     path: sdkbase
     ref: ${{ github.base_ref }}
   - name: Checkout this ref
```

```
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
```

```
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
```

```
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing

InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
```

\n\t\t\taddresses, and the credential provider for user administration. "
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about an Active Directory identity provider. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The domain name for the Active Directory. "
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an

```
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
```

```
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
```

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information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

   "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
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        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
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            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
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user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
```

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        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
```

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            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
```

```
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [
              {

                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
```

```
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",

                   "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
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true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
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                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
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                    "argv": [

                {
                            "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                    ]
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [],
            "endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"

}
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
```

```
                {

        "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

                ],
                    "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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```
                "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        }
      ],
      "type": "tree"
    },
    {
      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

    "UseFIPS": true,
        "UseDualStack": false
      }
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    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
 true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
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```
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
```

```
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
```

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      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
"Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
```

```
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
```

```
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
```

```
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
```

```
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
       "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
                }
            },
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>InstanceId</p>\n
</li>\n       </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
          "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output":
 {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

         "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"

        }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target":
 "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
       }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
      "IdentityProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to register.</p>",
                "smithy.api#required": {}
            }
        },

    "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
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            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",

          "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
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            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },

      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
          "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
      "type": "structure",
       "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
```

```
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
```

```
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
```

```
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
```

```
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
```

```
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
```

InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
```

```
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

        "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
```

```
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
```

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
```

```
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
```

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    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
      "type": "service",
      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region": {
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
                     "type": "Boolean"
                },
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```
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
      },
      {
        "conditions": [],
        "rules": [
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            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
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                    {

            "fn": "aws.partition",
                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                       "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
```

```
                                        "ref": "PartitionResult"

                    },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                     {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
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                            }
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                        "type": "tree"
                    },
                    {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {

      "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

            "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [
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                        "conditions": [],
```

```
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
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                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

```
                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
```

```
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ],
 "type": "tree"
 }
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},
"smithy.rules#endpointTests": {
 "testCases": [
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

 }
   },
   "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": true
   }
  },
  {
   "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
   "expect": {
    "endpoint": {
     "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
    }
   },
   "params": {
    "Region": "us-east-1",
```

```
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

    },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
```

```
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                      }
                     },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {

 "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
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            "UseFIPS": true,
            "UseDualStack": true
        }
    },
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

    }
            },
            "params": {
              "Region": "us-isob-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },

    {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {

      "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
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```
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",

                  "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "Enabled",
                  "value": "Enabled",
                  "documentation": "Enabled LinuxSubscriptionsDiscovery"
                },
                {
                  "name": "Disabled",
                  "value": "Disabled",
                  "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
            "type": "structure",
            "members": {
              "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n          <li>\n            <p>\n              <code>AccountID</code>\n
</p>\n          </li>\n          <li>\n            <p>\n              <code>AmiID</code>\n            </p>\n          </li>\n
        <li>\n            <p>\n              <code>DualSubscription</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n
  <p>\n              <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n
            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional
  objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
```

```
"<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
```

```
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken
 length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"

              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "RegisteredSubscriptionProviders"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSources": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

    "traits": {
                "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
 return \n\t\t\tin the list.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
 nextToken from a previously truncated response.</p>"
              }
            }
          },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "EQUAL",
                "value": "Equal",
```

```
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

    "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

           {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                 "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
```

```
        "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
                }
            },
```

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        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {

            "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
      "type": "list",
      "member": {
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```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
              },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {

        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
```

```
            },
            "InstanceCount": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
         "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "RedHat",
                  "value": "RedHat",
                  "documentation": "RedHat subscription provider namespace"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
```

```
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
```

```
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

    "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
```

```
Region.</p>"
                }
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }

    },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
             }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
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RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
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spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
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setOperationInput
ResolveEndpoint
InterceptBeforeSerialization

OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
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Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.126 aws-sdk-go-v2-feature-ec2-imds 1.18.6

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
```

```
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string
```

```
// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
```

```
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer

```
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about an Active Directory identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                  "smithy.api#required": {}
               }
            },
```

```
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
```

```
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
```

```
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
        "smithy.api#http": {
```

```
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

        }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                    }
                },
                "InstanceUserArn": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                    "traits": {
                        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                    }
                },
                "Domain": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                    }
                }
            },
```

```
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
```

```
            },
            "Operation": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
               }
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
```

```
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
```

```
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },

      "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
          },
          "StatusMessage": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
          },
          {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager User Subscriptions",
            "arnNamespace": "license-manager-user-subscriptions",
            "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

           "x-api-key",
              "authorization",
              "x-amz-date",
              "x-amz-security-token",
              "Access-Control-Allow-Headers",
              "Access-Control-Allow-Methods",
```

```
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

```
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Endpoint"
        }
      ]
    }
  ],
 "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [
        {

          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
```

```
        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "aws.partition",

                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },

true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
```

```
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
```

```
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }

    ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [

 {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "fn": "getAttr",
                      "argv": [

        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
```

```
                                ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
```

```
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

            }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

                        ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                        },
                        "type": "endpoint"
                    }
```

```
                    ],
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ]
          },
          "smithy.rules#endpointTests": {
            "testCases": [
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",

        "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
```

```
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
```

```
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
```

```
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
 disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
            "Endpoint": "https://example.com"
           }
        },
        {
          "documentation": "Missing region",
```

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                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
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            }
        },
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
```

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the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
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            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
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            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
{
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Product</p>\n            </li>\n            <li>\n                <p>DirectoryId</p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "NextToken":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
 <ul>\n            <li>\n                <p>Status</p>\n            </li>\n            <li>\n                <p>InstanceId</p>\n
 </li>\n        </ul>"
```

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
         "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
```

```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {

  "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
```

```
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

       "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
           },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
```

```
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
```

```
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

        }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target":
 "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
```

```
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

           "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
```

```
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
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```
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
              }
```

```
            },

        "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                 "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
```

```
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",

        "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {

     "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}

           }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
             "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
          }
        },
        "Product": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
          }
        },
        "ProductUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
          }
         }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

       "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
```

```
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
          }
        },
        "UpdateSettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
          "traits": {
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required":
```

```
{}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
```

```
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
```

```
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
```

```
    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
```

```
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
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```
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
```

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

```
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region": {
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                   "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                  "type": "Boolean"
                },
                "Endpoint": {
                  "builtIn": "SDK::Endpoint",
                  "required": false,
                  "documentation": "Override the endpoint used to send this request",
                  "type": "String"
                }
              },
              "rules": [
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                  "conditions": [
                    {
                      "fn": "isSet",
                      "argv": [
                        {
                          "ref": "Endpoint"
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
```

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                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

            ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
```

```
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
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                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }

  ],
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                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
                      "rules": [
                        {
                          "conditions": [],
```

```
      "rules": [
                                        {
                                          "conditions": [],
                                          "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }
                                      ],

                            "type": "tree"
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                                  "type": "tree"
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                                {
                                  "conditions": [],
                                  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                  "type": "error"
                                }
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                              "type": "tree"
                            },
                            {

          "conditions": [
                                {
                                  "fn": "booleanEquals",
                                  "argv": [
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                                      "ref": "UseFIPS"
                                    },
                                    true
                                  ]
                                }
                              ],
                              "rules": [
                                {
                                  "conditions": [
                                    {

                        "fn": "booleanEquals",
                                      "argv": [
                                        {
```

```
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
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                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
```

```
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true

                        ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {

                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "rules": [

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                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"

                        }
                                ],
```

```
                                    "type": "tree"
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                                    "conditions": [],
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                                    "type": "error"
                                }
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                            "type": "tree"
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                            "conditions": [],
                            "rules": [
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                                    "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
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                                    "type": "endpoint"
                                }
                            ],
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                        }
                    ],
                    "type": "tree"
                }
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            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
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"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
           },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
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                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
```

```
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
```

```
                    "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },

        {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
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                },
                "params": {
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```

```
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {

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                "UseDualStack": false,
                "Endpoint": "https://example.com"
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              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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              "params": {
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                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",

            "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
```

```
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
 subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Instances"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
 <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
 subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
   <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
 streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n
 </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n
          <li>\n              <p>\n                <code>DualSubscription</code>\n              </p>\n            </li>\n
 <li>\n              <p>\n                <code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n
   <p>\n                <code>InstanceType</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
     <code>ProductCode</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>Region</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>Status</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
 <code>UsageOperation</code>\n              </p>\n            </li>\n          </ul>\n          <p>For each filter, you can use
 one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n          <ul>\n
     <li>\n              <p>\n                <code>contains</code>\n              </p>\n            </li>\n            <li>\n
 <p>\n                <code>equals</code>\n              </p>\n            </li>\n            <li>\n
```

```
            <p>\n                <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional
 objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the
returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n
<p>The valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
```

```
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken
length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
}
}
}
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "RegisteredSubscriptionProviders"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

  "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
```

```
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },

      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

                 }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
```

```
    "members": {
      "tags": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "EQUAL",
          "value": "Equal",
          "documentation": "Equal operator"
        },
        {
          "name": "NOT_EQUAL",
          "value": "NotEqual",
          "documentation": "Not equal operator"
        },
        {
          "name": "CONTAINS",
          "value": "Contains",
          "documentation": "Contains operator"
        }
      ],
      "smithy.api#length": {
        "min": 1,
        "max": 20
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled OrganizationIntegration"
        },
        {
```

```
      "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

         {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
           "traits": {
             "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
             "smithy.api#required": {}
           }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat
Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
             "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {

           "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
             "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
              }
            },
            "SubscriptionProviderStatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
              }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {

                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "InProgress",
```

```
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the subscription.</p>"
          }
        },
        "Type": {
          "target": "smithy.api#String",
          "traits": {

     "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
          }
        },
        "InstanceCount": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
```

```
            "smithy.api#enum": [
                {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type":
"list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
                    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                 "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key":
{
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

   "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
            "smithy.api#input":
{}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required":
{}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
        }

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
          "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
        }

  },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
           }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization

OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
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InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.127 aws-sdk-go-v2-service-internal-s3shared 1.19.6

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GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity

```
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
```

```
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
```

spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming

RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer

InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http":
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
```

```
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
```

```
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
```

```
            "smithy.api#idempotent": {}

        }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                    }
                },
                "InstanceUserArn": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                    "traits": {
                        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                    }
                },
                "Domain": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
```

```
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
```

```
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
```

true

```
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

{
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {

                "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

}
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
```

```
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
```

```
        "endpoint":
{
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
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            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack":
false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error":
 "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
       }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

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            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
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                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
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            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",

             "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
```

```
            "documentation": ""
          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
        },
```

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            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "IdentityProviderSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Product</p>\n          </li>\n          <li>\n            <p>DirectoryId</p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists
 the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken":
 {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>InstanceId</p>\n
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "LicenseServerEndpoints"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest":
 {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                  "min": 1,
                  "max": 100
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {

   "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",

       "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
```

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next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {

     "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
             },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
```

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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
           "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

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                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"

            }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target":
 "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for this product
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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {

          "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
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            "traits": {

  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },

       "Product": {
            "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
             "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn":
 {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",

        "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
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        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

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            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {

  "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n         <note>\n
  <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for
billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For
more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name
 from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
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                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}

             }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {

   "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http":
{
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
           }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {

     "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry
the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
            }
```

```
            },
            "UpdateSettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required":
{}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such
 as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
```

```
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
//   - Beneficiary
//
//   - ProductSKU
//
//   - Fingerprint
//
//   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
```

```
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}
```

```
type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options)) (*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}
```

```
type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
```

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
```

```
    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
              }
            },
            "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
```

```
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
```

```
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
```

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"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
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            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
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    },
    "rules": [
      {
        "conditions": [
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            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
              "conditions": [],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                  ],
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                  "type": "error"
```

```
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {

    "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
```

```
                "argv": [

                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
                ]
            }
            ]
        }
        ],
        "rules": [
        {
            "conditions": [],

    "rules": [
                {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
                }
            ],

            "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

            "type": "error"
        }
        ],
        "type": "tree"
    },
    {

        "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
```

```
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

                    "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            },
                                            true

                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"
                                    }
                                ],
                                "type": "tree"
```

```
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true

          ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {

                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
```

```
        {
                                                "conditions": [],
                                                "endpoint": {
                                                   "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                   "properties": {},
                                                   "headers": {}
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                                             }
                                          ],
                                          "type": "tree"

                                    }
                                       ],
                                       "type": "tree"
                                    },
                                    {
                                       "conditions": [],
                                       "error": "DualStack is enabled but this partition does not support DualStack",
                                       "type": "error"
                                    }
                                 ],
                                 "type": "tree"
                              },
                              {
                                 "conditions": [],
                                 "rules": [
                                    {
                                       "conditions": [],
                                       "endpoint": {
                                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                          "properties": {},
                                          "headers": {}
                                       },
                                       "type": "endpoint"
                                    }
                                 ],
                                 "type": "tree"
                              }
                           ],
                           "type": "tree"
                        }
                     ],
                     "type": "tree"
                  },
                  {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
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        {

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            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }

        },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

 "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"

}
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
```

```
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },

    {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {

      "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
```

```
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
                }
            ],
            "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings":
{
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists
the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures
```

```
 that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify
<code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all
subscriptions that match a partial string in the \n    \t<code>Value</code>, such as <code>us-west</code>.</p>\n
  <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto
streamline results:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AccountID</code>\n
</p>\n            </li>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n            </li>\n
        <li>\n                <p>\n                    <code>DualSubscription</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n            <li>\n
  <p>\n                    <code>InstanceType</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code> values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n
    <li>\n                <p>\n                    <code>contains</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
            <p>\n                    <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional
 objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n      Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "Subscriptions"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

            "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>Subscription</code>\n      </p>\n      </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n      <li>\n      <p>\n      <code>contains</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>equals</code>\n      </p>\n      </li>\n      <li>\n      <p>\n      <code>Notequal</code>\n      </p>\n      </li>\n      </ul>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
              },
              "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                  }
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
            "type": "structure",
            "members": {
              "Subscriptions": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"

            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
```

```
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",

   "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
            }
          }
        },

        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
```

```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with
 the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
```

```
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {

"name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

       {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {

                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
```

```
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of
 the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The
 Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
```

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
```

```
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with
Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace.
Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing
from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",

     "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",
            "documentation": "INVALID status"
          },
          {
```

```
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList":
{
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                     "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key":
{
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",

   "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input":
{}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {

  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required":
{}
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
              "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
            }
          }

        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
              }

    },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
              }
             }
          }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
  }
```

}

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Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
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OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
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